MINUTES

CALIFORNIA TRAFFIC CONTROL DEVICES COMMITTEE (CTCDC) MEETING Pasadena, September 17 and 18, 2008

The third CTCDC meeting of year 2008 was held in Pasadena, on September 17 and 18, 2008.

Chairman Hamid Bahadori opened the meeting at 1:00 p.m. with the introduction of Committee members and guests. The Chairman also thanked Bhaman Janka, City of Pasadena, for hosting the CTCDC meeting in their facility. The following members, alternates, and guests were in attendance:

ATTENDANCE	ORGANIZATION	TELEPHONE
Members (Voting)		
Hamid Bahadori Chairman	Auto Club of Southern California	(714) 885-2326
John Fisher Vice Chairman	League of CA Cities City of Los Angeles	(213) 972-8424
Farhad Mansourian	CA State Association of Counties Marin County	(415) 499-6570
Wayne Henley	Caltrans	(916) 654-6246
Ed von Borstel	League of CA Cities City of Modesto	(209) 577-5266
Deborah Wong (Alternate)	California State Automobile Association	(415) 241-5847
Jacob Babico	CA State Association of Counties San Bernardino County	(909) 387-8186
Chief Steve Lerwill	СНР	(916) 657-7222
<u>Alternate</u>		
Jeff Knowels	League of CA Cities City of Vacaville	(707) 449-5349
Mark Greenwood	League of CA Cities City of Palm Desert	(760) 776-6450

<u>ATTENDEES</u> <u>ORGANIZATION</u> <u>TELEPHONE/E-Mail</u>

Dr. Jim Kholos Self (323) 254-9696

Mark Diercks City of Palm Desert <u>mdiercks@palm-desert.ca.us</u>

Kevin Davis CHP <u>kmdavis@chp.ca.gov</u>

Mina Layba City of Thousand Oaks <u>mlayba@toaks.org</u>

George MacDougall

CHP

gmacdougall@chp.ca.gov

Joe Indrawan

City of Chino

jindrawan@cityofchino.org

Jim Brunner

City of Simi Valley

jbrunner@simivalley.org

Munir Assaf

Caltrans D6

munir.assaf@dot.ca.gov

Jeffery Pasek

City of San Diego

jpasek@sandiego.gov

(619) 533-7599

Destree Buscos Collaborative Services destreel@collaborativeservices.biz

Walter Laabs City of Santa Rosa <u>wlaabs@srcity.org</u>

Tedi Jackson Western Municipal Water District tjackson@wwwd.com
Lee Reader Inland Empire Water Keeper lee@iewaterkeeper.org

Gregory Wright Private Citizen greg@newciv.org

Darryl Gaslan Air Resources Board dgaslan@arb.ca.gov

Laura Wells City of San Jose laura.wellsQsanjoseca.gov

Don Howe Caltrans –HQ Traffic-Ops don howe@dot.ca.gov

Johnny Bhullar Caltrans HQ Johnny.bhullar@dot.ca.gov Conrad Lapinski. City of Dana Point clapinski@danapoint.org

626-300-4731

Ron Miller City of Escondido <u>remiller@ci.escondidio.ca.us</u>

Kai Leung Caltrans –HQ Traffic-Ops kai.leung@dot.ca.gov

Karen Nieckula City of Chino knieckula@cityofchino.org

Martin Amundson LA County DPW mamund@ladpw.org
Jim Mishiko City of Thousand Oaks jmishiko@toaks.org

James Chon LA County DPW <u>jchon@ladpw.org</u>

Donald Discher Sunnyvale Dept. of Public Safety dodischer@ci.sunnyvale.ca.us

Steven Shladover UCB-PATH steve@path.berkeley.edu

Monica Suter City of Santa Ana msuter@santa-ana.org

Carol Pedder Friends of Mountain friendsofthemountain@charter.ne

Pam Carves Friends of Mountain

Robert Shanteau Consulting Traffic Engineer rmshant@gmail.com

CTCDC Minutes Page 3 of 58 September 17 and 18, 2008

Cesar Rono City of Santa Clarita <u>crono@santa-clarita.com</u>

Bahman Janka City of Pasadena bjanka@cityofpasadena.net

MINUTES

Adoption of May 29, 2008 CTCDC meeting minutes.

Motion: Moved by Jacob Babico, seconded by Wayne Henley, to adopt the minutes of the May 29, 2008 CTCDC meeting held in San Francisco, California. Motion carried 8-0.

Agenda Items:

08-6 Proposal to adopt "NO HYBRID DECALS EXCEPT CARPOOLS -WHITE DMV CLEAN AIR DECAL VEHICLES OK" R93B(CA)

Wayne Henley informed the Committee that Caltrans has withdrawn the proposed sign request and would wait until the law sunsets, which will occur in 2011.

Action: Item will be removed from the agenda.

08-9 Proposal to amend policies for the STOP sign and Boundary City Limit signs

Chairman Bahadori asked Wayne Henley to present this item.

Wayne Henley stated that the item was placed on the agenda because Caltrans has received inquiries about the signs placed above the STOP sign on the same post. Wayne Henley asked Johnny Bhullar to address the item.

Johnny Bhullar stated that there are two separate issues. First, he would like to address the signs posted above the STOP sign. Caltrans has received policy clarification from an individual asking that if a second sign is installed on the same post with a STOP sign, which sign should be on the top. Generally, the MUTCD and CA MUTCD discourage the installation of two signs on the same post. Exceptions are for one-way signs, divided highway signs, and street name signs, which can be placed with a STOP sign. Sometimes route shield signs supplement directional signs. Caltrans believes that the STOP sign is the main message and it shall be on top on the post. However, it will require changing the policy for STOP signs. Johnny Bhullar stated that the revised policy has been included in the agenda packet and asked that the Committee make a recommendation for the adoption.

Chairman Bahadori asked for comments from the Committee members.

John Fisher stated that he would make some amendments to the proposed language included in the agenda packet. The first amendment is to **Section 2A.16 item 'C'**, replace "a speed limit" with "another", shown as follows:

Section 2A.16 (amendment proposed by John Fisher is in Italic, underlined & red)

Guidance:

C. Regulatory signs that do not conflict with each other are grouped, such as turn prohibition signs posted with one-way signs, street name signs posted with a stop or yield sign, or a parking regulation sign posted with a speed limit another sign.

John Fisher also proposed to delete the following proposed standard language from Section 2A.16:

Standard:

If other signs are grouped with a STOP sign, except for Street Name (D3-1 or G7-1(CA)) signs (see Section 2D.38), they shall be installed below the STOP sign.

John Fisher further proposed to revise standards proposed under **Section 2B.06 STOP Sign** as shown below in italics and underlined:

Section 2B.06 STOP Sign Placement (proposed language is in red)

Standard:

The STOP sign shall be installed on the right side of the approach to which it applies. When the STOP sign is installed at this required location and the sign visibility is restricted, a Stop Ahead sign (see Section 2C.29) shall be installed in advance of the STOP sign.

The STOP sign shall be located as close as practical to the intersection it regulates, while optimizing its visibility to the road user it is intended to regulate.

STOP signs and YIELD signs shall not be mounted on the same post.

If other signs are grouped with a STOP sign, except for <u>One Way (R1 and R6-2)</u> Street Name (D3-1 or G7-1(CA)) signs (see Section 2D.38), they shall be installed below the STOP sign.

John Fisher also suggested adding language under <u>Section 2B.37 One Way Signs R6-1 & R6-2</u>) as follows:

One Way sign may be placed above the STOP sign or another regulatory sign that is supplemented.

Chairman Bahadori stated that this may be a conflicting statement, because under the STOP sign policy, the requirement is "shall", and under **Section 2B.37 One Way Signs** the requirement is ""may".

John Fisher agreed with Chairman Bahadori's comment and suggested that the language under **Section 2B.37** be read as follows:

Section 2B.37 ONE WAY Signs (R6-1, R6-2)

Standard:

The ONE WAY (R6-1) sign shall be used on one-way streets, divided highways, and ramp terminals to indicate streets or roadways upon which vehicular traffic is required in one direction only. The R6-1 signs shall be placed on the far right and in the median on the left side of traffic entering the highway where the median is more than 9 m (30 ft) wide as shown in Figure 2B-13 (CA).

On State highways where medians are less than 9 m (30 ft) wide, raised or unpaved, the R6-1 signs shall be placed in the median as shown in Figure 2B-14 (CA).

When grouped with STOP sign or with another regulatory signs, One Way signs (R6-1 & R6-2) shall be placed at the top.

John Fisher stated that is his Motion.

Farhad Mansouiran seconded the Motion.

Chairman Bahadori asked for discussion on the Motion.

Jacob Babico asked for clarification on the proposed amendment to replace the wording "a speed limit sign" to "another sign" under Section **2A.16**, **item 'C'**. He stated that may be a conflict with Part 1 of CA MUTCD where it says, do not mix different sign on the same post".

There was a discussion on this issue, however the resolution was that the proposed language talks about the specific signs and does not conflict with Part 1.

Jacob Babico commented that he has seen in urbanized areas Neighborhood Watch signs on the same post, however they are placed on the backside of the STOP sign so that the motorist approaching the stop sees the STOP message and opposing traffic will see the Neighborhood Watch message.

Johnny Bhullar responded that as long as the shape of the sign is not altered, the CA MUTCD does allow this type of sign.

Chairman Bahadori asked for comments from the public.

Munir Assaf, Caltrans District 6, commented that the "Cross Traffic Does Not Stop" signs are posted with STOP signs.

Johnny Bhullar responded that the issue is when a second sign is used with a STOP sign, the STOP shall be posted above the other signs. The "Cross Traffic Does Not Stop" is placed below the STOP sign and that is acceptable.

Joe Indrawan, City of Chino, stated that Section 2A.16, Standardization of Location, states at the beginning of the Section that the "sign should be located", and in his opinion the "should" is not

mandatory and he recommended to replace it with a "shall". He further commented on Section 2A.16, Item 'C" the sentence starts with "regulatory signs". He stated that the sentence should start with "signs" and to delete the word regulatory. He gave some examples for the grouped signs, such as turn prohibition signs be posted with one way signs, street name signs posted with STOP or YIELD signs, and parking regulation signs posted with speed limit signs. He added that if the last example creates confusion, he would recommend keeping the first two and deleting the last one.

There were no other public comments. Chairman Bahadori closed the public hearing and opened discussion amongst the Committee members.

Wayne Henley stated that the comment from Joe Indrawan regarding Section 2A.16, Item 'C' has a valid point.

John Fisher stated that he is willing to make a friendly amendment to his motion by striking the word "regulatory" and start the sentence with "signs" for item 'C".

Chairman Bahadori asked Farhad Mansourian if he will second the Motion as amended.

Farhad Mansourian stated yes.

Motion: Moved by John Fisher, seconded by Farhad Mansourian, recommended that Caltrans amend the following sections of the CA MUTCD to allow One Way signs and Street Name signs to be placed above the STOP sign.

The following is the revised policy based on discussion:

Section 2A.16 Standardization of Location:

C. Regulatory Signs that do not conflict with each other are grouped, such as turn prohibition signs posted with one-way signs, street name signs posted with a stop or yield sign, or a parking regulation sign posted with a speed limit another sign.

Standard:

If other signs are grouped with a STOP sign, except for Street Name (D3-1 or G7-1(CA)) signs (see Section 2D.38), they shall be installed below the STOP sign.

Section 2B.06 STOP Sign Placement

Standard:

The STOP sign shall be installed on the right side of the approach to which it applies. When the STOP sign is installed at this required location and the sign visibility is restricted, a Stop Ahead sign (see Section 2C.29) shall be installed in advance of the STOP sign.

The STOP sign shall be located as close as practical to the intersection it regulates, while optimizing its visibility to the road user it is intended to regulate.

STOP signs and YIELD signs shall not be mounted on the same post.

If other signs are grouped with a STOP sign, except for <u>One Way (R6-1 and R6-2) and</u> Street Name (D3-1 or G7-1(CA)) signs (see Section 2D.38), they shall be installed below the STOP sign.

Section 2B.37 ONE WAY Signs (R6-1, R6-2)

Standard:

The ONE WAY (R6-1) sign shall be used on one-way streets, divided highways, and ramp terminals to indicate streets or roadways upon which vehicular traffic is required in one direction only.

The R6-1 signs shall be placed on the far right and in the median on the left side of traffic entering the highway where the median is more than 9 m (30 ft) wide as shown in Figure 2B-13 (CA).

On State highways where medians are less than 9 m (30 ft) wide, raised or unpaved, the R6-1 signs shall be placed in the median as shown in Figure 2B-14 (CA).

When grouped with STOP sign or with another regulatory sign, One Way sign shall be placed at the top.

Chairman Bahadori asked whether the Committee members have any other comments. There were none.

Motion carried 8-0.

Action: Item closed and Caltrans will inform the Committee when they revise the effected Sections of the CA MUTCD and will post on the following website.

http://www.dot.ca.gov/hq/traffops/signtech/signdel/policy.htm

Chairman Bahadori asked Johnny Bhullar to address the second issue of this item regarding the Boundary City Limit Signs.

Johnny Bhullar stated that there was another inquiry in regards to the city/county limit signs. Currently, there are two policies, one for Unincorporated Community and City Limit limits, it says the sign "shall" be at the limit line to mark the city limits and to identify unincorporated towns. However, for the county boundaries limit signs the policy says the sign "should" be at boundary lines. The Committee recommended during the previous meeting that Caltrans bring a revised policy with "should" conditions for the City Limits and Unincorporated Towns signs. The revised policy states that the boundary limit signs should be placed as close to the limit line as practical. By doing that, both policies would be consistent.

Chairman Bahadori asked for public comments.

Walter Labbs, City of Santa Rosa, asked if the boundary sign is to be installed at all the entry points or if it is at the discretion of a local agency.

Chairman Bahadori responded that in his opinion it is the discretion of the locals.

Jeff Knowles stated that close proximity leaves the interpretation to the locals and they might install signs miles away from the actual limit line. Jeff also stated that sometimes the CHP enforces traffic violations in unincorporated areas and if the boundary limit line is marked incorrectly, it could affect incident records.

There were no other public comments.

Chairman Bahadori opened the discussion amongst the Committee members.

John Fisher stated that he prefers the guidance statement because in certain conditions it may not be practical to install a sign exactly at the boundary line.

Motion: Moved by John Fisher, seconded by Wayne Henley, recommends adopting the guidance statement as proposed to provide flexibility.

Chairman Bahadori asked for discussion on the Motion.

Steve Lerwill stated that the Committee should make sure the amended policy does not conflict with the Streets and Highways Code.

Johnny pointed out that Section 2D.48 contains a reference to the Streets and Highways Code.

Since no one was clear if the amended policy is in conflict with the Streets and Highways Code, it was decided to bring back the item after reviewing all the laws and regulations related to the proposal.

The motion was withdrawn.

Action: Caltrans will review the Streets and Highways Code and other laws to ensure that revised policy does not conflict with existing laws and bring back the item for a future meeting.

08-10 Proposal to adopt "WATCH FOR STOPPED VEHICLES" sign

Chairman Bahadori asked Wayne Henley to introduce the agenda item "WATCH FOR STOPPED VEHICLES" sign.

Wayne Henley stated that Caltrans District 8 has a queue dilemma on SR 330 at the I-10 junction during commute hours. The District would like to use this sign to warn traffic about the queued traffic ahead. Wayne Henley asked Johnny Bhullar to discuss the proposal with the Committee and audience.

Johnny Bhullar stated that the proposal is to make a recommendation to adopt a new sign "WATCH FOR STOPPED VEHICLES", which will be used in conditions where traffic is stopped due to congestion or other reasons which are not related to stopped traffic due to a traffic control device. The current sign "BE PREPARED TO STOP' will be used where traffic is stopped due to a traffic control device, such as a traffic signal, STOP signs, etc.

Johnny Bhullar stated that Caltrans proposes to amend the current **Section 2C.29 Advance Traffic Control Signs (W3-1, W3-2, W3-3, W3-4)** by adding a new sign "WATCH FOR STOPPED VEHICLES'. The Following is the amended policies (in red), including the manner in which they could be incorporated into the CA MUTCD:

Section 2C.29 Advance Traffic Control Signs (W3-1, W3-2, W3-3, W3-4) Option:

A warning beacon may be used with an Advance Traffic Control sign.

A BE PREPARED TO STOP (W3-4) sign (see Figure 2C-4) may be used in advance of a traffic control device that could require motorists to stop, such as a traffic control signal or a STOP sign.

A BE PREPARED TO STOP (W3-4) sign (see Figure 2C-4) WATCH FOR STOPPED VEHICLES (SW60(CA)) sign (see Figure 2C-4(CA)) may be used to warn motorists of stopped traffic, caused by a traffic control signal or such as in advance of a section of roadway that regularly experiences traffic congestion.

Johnny Bhullar asked the Committee to make recommendations for the adoption of amended policy for the use of "WATCH FOR STOPPED TRAFFIC" sign.

Chairman Bahadori asked if Committee members had any questions for Johnny Bhullar.

There were none, then Chairman Bahadori asked comments from the public.

Jeff Knowles, alternate member, commented that the current language prohibits the use of the "When Flashing" (W16-13p) sign. However, in certain conditions the flashing beacon has been used.

There were no other public comments.

Chairman Bahadori closed the public comments and opened discussion amongst Committee members.

John Fisher stated that he agreed with Jeff's comments because flashing beacons has been used in certain conditions.

Johnny Bhullar responded that the reason for not allowing the use of "When Flashing" is due to a law suit against Caltrans and if the Committee wishes to reopen this issue again, then treat the issue separately and not to mix the issue with the proposal.

John Fisher stated if that is the case, then he would like to strike out the red proposed language under the standards and recommends adoption of the optional language. He stated that is his motion.

Wayne Henley seconded the Motion.

Chairman Bahadori asked for discussion on the Motion.

Jacob Babico stated that he would suggest replacing the word "roadway" with "freeway" under the option, because the proposed sign is for freeway congestion.

Farhad Mansouiran stated that he would like to keep the word "roadway" in the option statement because the locals could use the proposed sign if a similar condition exists on local roads. By replacing the word "roadway" with 'freeway", it would limit the use of the sign only for on freeways. He would like to keep the flexibility.

Steve Lerwill stated that due to the legal liability mentioned by Caltrans, he will support the adoption of the language as proposed and bring a separate item to discuss John Fisher's and Jeff Knowles' concern.

Chairman Bahadori agreed with both John Fisher and Steve Lerwill's comments.

Chairman Bahadori asked John Fisher if he would like to amend his motion or would like to seek a vote.

John Fisher responded that he would like to seek vote on the motion. Motion failed.

The other motion was moved.

Motion: Moved by Farhad Missourian, seconded by Steve Lerwill, recommends for the adoption of language as proposed in the agenda.

The proposed language is as follows:

Section 2C.29 Advance Traffic Control Signs (W3-1, W3-2, W3-3, W3-4)

Option:

A warning beacon may be used with an Advance Traffic Control sign.

A BE PREPARED TO STOP (W3-4) sign (see Figure 2C-4) may be used in advance of a traffic control device that could require motorists to stop, such as a traffic control signal or a STOP sign.

A BE PREPARED TO STOP (W3-4) sign (see Figure 2C-4) WATCH FOR STOPPED VEHICLES (SW60(CA)) sign (see Figure 2C-4(CA)) may be used to warn motorists of stopped traffic, eaused by a traffic control signal or such as in advance of a section of roadway that regularly experiences traffic congestion.

Standard:

When a BE PREPARED TO STOP sign is used in advance of a traffic control signal, it shall be used in addition to a Signal Ahead sign.

Option:

The BE PREPARED TO STOP sign may be supplemented with a warning beacon (see Section 4K.03).

Guidance:

When the warning beacon is interconnected with a traffic control signal or queue detection system, the BE PREPARED TO STOP sign should be supplemented with a WHEN FLASHING plaque.

Standard:

A warning beacon or WHEN FLASHING (W16-13p) plaque shall not be used to supplement the BE PREPARED TO STOP (W3-4) sign or WATCH FOR STOPPED VEHICLES (SW60(CA)) sign. Studies indicate that these devices are generally not effective as warning devices for motorists approaching signalized intersections. The non-use of a warning beacon or WHEN FLASHING (W16-13p) plaque also addresses the situation when a warning beacon is inoperative for any reason.

Motion carried 6-2 (John Fisher abstained and Jacob Babico voted no).

Action: Caltrans will amend the policy as recommended and will post on the following website: http://www.dot.ca.gov/hq/traffops/signtech/signdel/policy.htm

Chairman Bahadori stated that the City of Vacaville or the City of LA could initiate a request to reopen flashing beacon issue.

NOTE: The CTCDC Secretary have received email from John Fisher/Jeff Knowles regarding the use of flashing beacons and they agreed that their concern is not affected by the action taken by the Committee. The action taken by the CTCDC did not effect Chapter 4 "FLASHING BEACONS" of the CA MUTCD which continues to allow the types of signal ahead and other advance flashing yellow beacons they were concerned about.

08-12 Report DRUNK DRIVERS – CALL 911 (G81-6X(CA)

Chairman Bahadori asked Wayne Henley to introduce the agenda item REPORT DRUNK DRIVERS sign.

Wayne Henley stated that Caltrans with cooperation of the Office of Traffic Safety and the California Highway Patrol, initiated a safety campaign by installing REPORT DRUNK DRIVERS signs. He asked Johnny Bhullar to discuss the proposal with the Committee members and audience.

Johnny Bhullar informed the Committee that the REPORT DRUNK DRIVERS sign was not an official traffic control device. However, there was a campaign by the California Office of Traffic Safety (OTS), California Highway Patrol (CHP), California Department of Transportation (Caltrans), Department of Motor Vehicles (DMV) and Department of Alcoholic Beverage Control (ABC) to crackdown on DUI drivers during the holidays. The plan includes the installation of "REPORT DRUNK DRIVERS CALL 911" signs throughout California in conjunction with the media campaign. In response to this campaign, Caltrans has installed 759 signs, resulting in one sign every 40 miles in each direction on the entire State highway system.

Johnny Bhullar further added that some local agencies have started installing these signs on their facilities and Caltrans has received requests from agencies seeking specifications for ordering these signs. In the interest of uniformity and to meet this need, Caltrans proposes to make this sign an official sign, for use on all public roadways as part of the agency's safety campaign. He pointed out page 18 of the agenda has proposed policy as an option to use this sign. The following is a proposed policy:

Section 2D.48 General Information Signs (I Series)

REPORT DRUNK DRIVERS CALL 911 (G81-6X(CA)) Sign

Option:

The REPORT DRUNK DRIVERS CALL 911 (G81-6X(CA)) Sign may be installed on the roadway as a part of the agency's safety campaign.

Chairman Bahadori asked the Committee members if they have questions for Johnny Bhullar.

Jacob Babico suggested using "safety enhancement" instead of "as a part of the agency's safety campaign".

Chairman Bahadori agreed with Jacob's comments.

Steve Lerwill also supported adoption of the sign and agreed with Jacob's suggestion.

Chairman Bahadori asked for comments from the public, there were none.

There were no other comments from the Committee members.

Motion: Moved by Jacob Babico, seconded by Farhad Mansourian, recommended to adopt sign specifications and revised policy as shown below:

Option:

The REPORT DRUNK DRIVERS CALL 911 (G81-6X(CA)) Sign may be installed on the roadway as a part of the agency's safety campaign. for safety enhancement.

Motion carried 8-0.

Action: Caltrans will adopt the sign specifications and policy and post on the CA MUTCD website under New Policies for future inclusion into the CA MUTCD.

http://www.dot.ca.gov/hq/traffops/signtech/signdel/policy.htm

08-13 MUTCD 2003 Revision No. 2 Maintaining Traffic Sign Retroreflectivity

Chairman Bahadori asked Wayne Henley to introduce agenda item MUTCD Revision No. 2, Maintaining Traffic Sign Retrorefectivity.

Wayne Henley stated that MUTCD Revision No. 2 addresses the retrorefletivity of the traffic signs. He added that Don Howe, in charge of signs, will be sharing a PowerPoint presentation with the Committee members and the audience.

Before Don Howe started his presentation, Johnny Bhullar shared the process for adopting Revision No 2, Maintaining Traffic Sign Retrorefectivity into the CA MUTCD. He stated that FHWA has issued Revision No. 2 to their MUTCD 2003 Edition, as published in the Federal Register on December 21, 2007. It primarily deals with the maintenance of traffic sign retroreflectivity. However, California has a maximum of 2 years from the December 21, 2007 date to incorporate these changes into the California MUTCD.

Don Howe shared a PowerPoint presentation. The complete PowerPoint presentation can be accessed at the following website:

http://www.dot.ca.gov/hq/traffops/signtech/newtech/minutes.htm

Don Howe commented on why there is a need for having a minimum retroreflectivity for different signs. He shared a slide which listed different types of sheeting and their life to provide minimum required retroreflectivity. He also shared different methods to determine the required retroreflectivity. He asked whether the Committee members had any questions for him.

Don Howe shared the different target dates to comply with the federal requirements to maintain retroreflectivity.

Jacob Babico stated that Table 2A-3 has a heading "Minimum Maintained Retroreflectivity Levels", and he suggested it should read "Minimum Maintained Signs Retroreflectivity Levels".

Farhad Mansourian asked what method would be used by LA City and Caltrans to determine the minimum retroreflectivity requirements.

John Fisher stated that his department is keeping track of retroreflectivity based on the age of the signs. They show dates at the bottom of the sign sheeting, indicating when they were installed and then have a program to change signs periodically from 10 to 15 years, based on the life of the sign sheeting. The City has maintenance staff which would be keeping track on this process.

Wayne Henley stated that Caltrans conducts night reviews to keep track of the visibility of signs and replace them if needed.

Chairman Bahadori asked for public comments.

Laura Wells, City of San Jose, asked if the PowerPoint presentation could be made available to local agencies.

Don Howe responded yes, it will be made available to local agencies by posting on CTCDC website as listed below:

http://www.dot.ca.gov/hq/traffops/signtech/newtech/minutes.htm

Jeff Knowles, alternate member, asked whether there is a possibility to receive an extension for the implementation of this program, because of the economic situations of the State and local agencies.

Don Howe asked the Committee to make a recommendation for the adoption of Revision No.2 into the CA MUTCD.

Farhad Mansourian asked whether the extension request raised by the City of Vacaville could be asked to FHWA.

Johnny Bhullar stated that FHWA has outlined the implementation time period and it is a "shall" condition. He does not believe there would be any possibility to receive an extension.

There were no other comments.

Motion: Moved by Farhad Mansourian, seconded by John Fisher, recommended that Revision No. 2 Maintaining Retroreflectivity be adopted into the CA MUTCD.

Motion Carried 8-0.

Action: Caltrans will keep the Committee informed on the status of the adoption.

NOTE: Readers for more information, please click on the following website:

http://mutcd.fhwa.dot.gov/pdfs/2003r1r2/mutcd2003r2pages.pdf

The following information is published by the FHWA which talks about the <u>New Sign Retroreflectivity Requirements</u>

New Sign Retroreflectivity Requirements

One of the Federal Highway Administration's (FHWA's) primary missions is to improve safety on the nation's roadways. Approximately 42,000 people have been killed on American roads during the last decade. While only one-quarter of all travel occurs at night, about half of the traffic fatalities occur during nighttime hours. To address this disparity, the FHWA has adopted new traffic sign retroreflectivity requirements that are included as Revision 2 of the 2003 MUTCD.

To comply with the new requirements, public agencies will have until January 2012 to implement and then continue to use an assessment or management method that is designed to maintain traffic sign retroreflectivity at or above the minimum levels specified. Five assessment or management methods are defined in the MUTCD as acceptable maintenance methods for traffic signs. Agencies are also permitted to develop and use other methods based on engineering studies.

Public agencies will have until January 2015 to replace any regulatory, warning, or post-mounted guide (except street name) signs and until January 2018 to replace any street name signs and overhead guide signs that are identified by the assessment or management method as failing to meet the minimum retroreflectivity levels.

If an assessment or management method were being used, an agency would comply with the requirements of the new provisions even if there were some individual signs that do not meet the minimum retroreflectivity levels at a particular point in time. Because of the seven to 10-year compliance period adopted for replacing signs that have insufficient retroreflectivity, highway departments will be able to implement improved sign inspection and management procedures and subsequently replace the signs in a period that is consistent with the typical sign replacement cycle.

Sheeting types (as defined in ASTM D4956) that can be used according to the new requirements are as follows:

- All prismatic sheeting materials may be used for all signs.
- High Intensity Beaded (Type III) and Super Engineer Grade (Type II) may be used for all signs except for the white legend on overhead guide signs.
- Engineer Grade (Type I) may be used for all signs except for:
 - o The white legend on guide signs,
 - o The white legend on street name signs, and
 - o All yellow and orange warning signs.

Even though a particular type of sheeting might initially meet the minimum retroreflectivity levels when new, it might quickly degrade to below the minimum retroreflectivity levels. For additional information on this rulemaking and sign retroreflectivity, please visit the FHWA retroreflectivity web site www.fhwa.dot.gov/retro.

08-17 Proposal to adopt the "BIODIESEL" plaque and the "Ethanol 85 (E85) Alternative Fuel" sign as optional signs

Chairman Bahadori asked Wayne Henley to introduce the agenda item for the BIODIESEL and Ethanol E85 sign.

Wayne Henley stated that there are different types of fuel coming into the market and motorists need to know their availability locations. The City of Tulare has a gas station with Ethanol 85 fuel and they requested a sign on the highway which has been installed. There may be more types of alternative fuel coming in the future and more signs may be needed. There was also a request for the BIODISEL sign. Wayne asked Don Howe to share the proposal with the Committee members and audience.

Don Howe stated that in Feb 2008, the City of Tulare opened an E85 fueling station. Tulare's Public Works Department provided signs and asked the Caltrans District 6 office to install these signs to direct motorists seeking the Ethanol 85 (E85) fueling station. Caltrans District 6 staff responded that the sign does not appear in the CA MUTCD. The City of Tulare wrote to the Director of FHWA and asked for the E85 variation of the general service alternative fuel symbol sign with "E85" placed on the face of the fuel pump symbol. The City of Tulare received a response from FHWA, dated 29 February 2008, that gave the opinion of FHWA that this sign is in conformance with the provisions of the MUTCD. Director Robert Arnold encouraged the City of Tulare to provide public comment on the NPA for the next edition of the MUTCD, by July 31, 2008, to include this variation of the "CNG" (D9-11a) Alternative Fuel sign, identifying Ethanol 85 (E85) as another alternative fuel option. Caltrans District 6 did install this sign.

Don Howe further stated that the proposal brought to the Committee is to make a recommendation for the adoption of these signs. The E85 General Service sign meets the "Symbol" requirements, per FHWA, with a variation in the legend to an established Compressed Natural Gas (CNG) Alternative Fuel sign. Also, the BIODIESEL plaque may be optional to place below the standard Diesel Fuel (D9-11) symbol sign (with a superimposed "D") where biodiesel alternative fuel is available.

Amended (in red) Section 2D.45 General Services Signs (D9 Series)

Fuel (Gasoline and Diesel) Signs (D9-7, D9-11, G66-11(CA), G66-11A(CA), G66-12B(CA), G66-22A(CA), G66-22B(CA), G66-23(CA) and G81-52(CA))

Option:

- 7. The DIESEL (G66-12A(CA)) plaque may be used in addition to other appropriate service signs. The BIODIESEL (G66-12B(CA)) plaque may be used below the D9-11 sign where biodiesel alternative fuel is available.
- 12. The Ethanol 85 Alternative Fuel (G66-23(CA)) sign may be used for Ethanol 85 Refueling Stations within 4.8 km (3 mi) of a State highway and be available to the public at least 16 hours a day.

Chairman Bahadori asked whether the Committee member has questions for Don Howe.

Deborah Wong suggested creating a plaque which could be placed under the gas pump symbol and the plaque could be used for different fuels.

Steve Lerwill stated that there may be a need to develop something similar to the food signs placed on the freeways. The different fuel panels could be placed to identify the availability of different types of fuels.

Farhad Mansourian suggested that the Committee may consider giving a blanket recommendation to Caltrans, if there is a similar fuel sign request, Caltrans could develop sign specs and policy, then there is no need to bring the item to the Committee. During the following meeting, Caltrans shared that new sign with the Committee by placing it on the agenda as an information item.

Johnny Bhullar suggested developing a policy which could cover all the new fuel signs.

The Committee unanimously recommended that Caltrans develop a generic policy by using a gas pump as a symbol with a supplemental plaque. The plaque could be used for different types of fuels. In addition, there was a suggestion to look at the possibility of developing a sign with panels (similar to food signs on the freeway) and those panels could be used to identify different fuel availability.

Action: Caltrans will develop draft policy and sign specifications and place the item on the CTCDC agenda for the January 2009 meeting for the Committee's review and action.

08-18 Proposal to adopt "NO IDLING COMMERCIAL VEHICLES & SCHOOL BUSES" Sign

The item was deferred for the future meeting. Darryl Gaslan, Department of Air Resources Board (ARB), requested that they would like to table this item due to the pending legislation on this matter and will request in the future to place this item back on the CTCDC agenda. Darryl Gaslan informed the Committee that the ARB has proposed some revisions to the California Vehicle Code (CVC) to provide authorization to ARB to cite vehicles if they are breaking the law.

Jacob Babico asked if the No Idling program could be expanded to include local facilities.

Darryl Gaslan responded that he is not sure at this point if locals will be included under the proposed amendments.

John Fisher stated that he supports the No Idling program. However, he would not support the installation of the signs. It would be a major burden on local jurisdictions. In Los Angeles alone, there would be a need of thousands of signs. The installation of these signs at all the elementary, middle and high schools would create a financial burden, and sign clutter.

Darryl Gaslan stated that the law currently only prohibits idling trucks and school buses on State facilities such as Capital parking, Universities, rest areas, etc. The local facilities are not included. However, he added that they could cite a truck/school bus on local streets if it violates the law.

Chairman Bahadori stated that the legislation is pending and he suggested if locals do not like the verbiage of the legislation they should raise their concerns during the hearing of the legislation. He further stated that the item is not for action, however he gave an opportunity to the public to provide comments.

Gregory Wright stated that instead of using a sign, it may be a good idea to use an icon or a symbol to spread the message. He added that it will be easier to develop a symbol to convey the message.

Chairman Bahadori stated it is a good idea and asked Gregory Wright to discuss with Johnny Bhullar.

08-23 Worker Visibility

Chairman Bahadori asked Wayne Henley to introduce the agenda item Worker Visibility.

Wayne Henley stated that FHWA has published the final ruling on worker visibility in the Federal Register on November 24, 2006 and it will become effective November 24, 2008 for workers who are working within the right-of-way on Federal-aid highways. Wayne Henley asked Johnny Bhullar to share the proposal with Committee members and audience.

Johnny Bhullar stated that the proposal is applicable only on workers who are working within the right-of-way of Federal-aid highways system. He added that this final ruling by FHWA amends Title 23 of the CFR (Code of Federal Regulations) and not the MUTCD. The intent is that this rule be applicable to only workers whose duties place them on or in close proximity to Federal-aid highways. The MUTCD is applicable to all streets and highways open to the public, which is much broader than the requirement in SAFETEA–LU upon which this rule is based.

Johnny Bhullar further stated that FHWA is proposing in the next revision to the MUTCD, the ANSI 107-2004 high-visibility safety apparel. However, the proposed NPA to the MUTCD was open for public comment through July 31, 2008. When FHWA issues a final rule for this revision, sometime in 2009, then Caltrans will look at adopting this rule for all public roadways in California within 2 years of the issuance of the final rule.

Johnny Bhullar stated that this document is available at the following web link:

http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=2006 register&docid=E6-19910.pdf

Johnny Bhullar asked the Committee members, should California adopt the FHWA regulations issued as applicable only on the federal-aid highways or if California should adopt the ruling on all roadways.

Chairman Bahadori asked whether the Committee members had any questions for Johnny Bhullar.

John Fisher asked whether the policy is applicable on all the local roads which are on the federal-aid system.

Johnny Bhullar responded yes.

Steve Lerwill commented that he would not recommend including local roads which are not on the federal-aid system. The regulation says that work zone areas are to comply with new guidelines and CHP believes that law enforcement would be an easier target. He added that CHP does have their own policy in regards to this and they would prefer to follow that.

Chairman Bahadori questioned that if this is the new regulation and Caltrans adopts it as is, then what would the new position of law enforcement be. Are you going to initiate legislation to get exemption for law enforcement agencies?

Steve Lerwill stated that they will handle this issue internally and does not suggest mixing the issue with the proposal for the adoption into the CA MUTCD.

There was a detailed discussion amongst Committee members in regards to the implementation of this policy. The discussion topic was about whether California should implement these new guidelines on all roadways or just limit it to the federal-aid highways as required by FHWA. In California, approximately

90% of the roadway system is on the federal-aid system. The members were in opinion that if 90% of roadways are under the federal-aid system, and the new "Workers Visibility" guidelines will be applicable from November 24, 2008, then why keep the remaining 10% of roadways (local roads) out of this policy. The Committee members were in the opinion to having one safety standard for all roadways.

The Committee member Jacob Babico asked if this policy could be delayed based on the economic conditions of the local agencies as well as of the State.

Johnny Bhullar responded to comply with this requirement since it is a "shall" condition, therefore he does not believe there is room for extension. However, FHWA has stated that States and local agencies may use funding available under Section 402 of Chapter 4 of Title 23, the State and Community Highway Safety Grant Program, to purchase or replace high-visibility garments for worker safety when this purchase is part of an eligible Section 402 highway safety project included in the State's approved highway plan.

Chairman Bahadori asked for public comments.

Walter Labbs asked whether the regulations applicable are based on the roads functional classification or if it is on all federal-aid highways.

Johnny Bhullar stated it is on all the federal-aid highways.

Laura Wells asked if the current Section 7E.04 allows the use of student patrols for the school crossing. However, the proposed policy has deleted the use of student patrol.

Johnny Bhullar responded that he is not sure why the student patrol has been deleted, however, there is a current Section 7E.08 in the CA MUTCD, Choice of Student Patrol, which does allow the use of student patrol and it is supported by the California Code of Regulations, Section 571.

Joy Indrawan asked that if a local agency has a project on the federal-aid highway system, should they include these requirements in the specifications. He further asked that if a project on the federal-aid highways system does not involve federal funding, do agencies still have to follow new regulations.

Johnny Bhullar responded yes.

Wayne Henley stated that the new requirement will become a part of the encroachment permit system. When an agency applies for an encroachment permit to perform work on the State Highways, this will become a part of the encroachment permit guidelines.

Mark Greenwood, alternate member, commented that most of the local agencies follow Caltrans standards. He suggested adopting the new regulation on all roadways for safety reasons.

There were no other public comments, Chairman Bahadori closed the public comments and opened discussion amongst Committee members.

Farhad Mansourian commented that the question is should this Committee make a recommendation to Caltrans to adopt this regulation only for federal-aid highways as issued by FHWA or if the committee should recommend adopting the regulation on all roadways. Based on the conversation amongst Committee members and the audience, the majority would like to have similar standards for all roadways because of safety.

Motion: Moved by Farhad Mansourian, seconded by John Fisher, requested that Caltrans adopt the federal policy on "Workers Visibility" on all roads to keep consistency and uniformity for the safety of workers.

Chairman Bahadori asked discussion on the motion.

John Fisher stated that he would like to make a friendly amendment to the motion by adding a statement, "since the new regulations are effective from November 24, 2008, Caltrans expedite the process and issue a policy so that locals agencies could buy the required equipment."

Farhad Mansourian accepted the friendly amendment.

Motion carried 8-0.

Action: Caltrans will inform the Committee members when the policy is adopted and posted on the following website:

http://www.dot.ca.gov/hq/traffops/signtech/signdel/policy.htm

08-24 Proposal to Adopt POST OFFICE Directional SG60(CA) sign

Chairman Bahadori asked Jacob Babico to introduce the agenda item for the POST OFFICE sign.

Jacob Babico stated that he received a request from a post office to install a sign at the highway in a rural area. He checked with Caltrans and there were no standard sign for this request in the CA MUTCD. There are similar sign as white on brown. The area from where the request came is a recreational area, where the majority of people are tourist, therefore, there is a need for post office information. Jacob Babico stated that he discussed this with Don Howe, who is in charge of the signing. Don stated that he will propose a new sign. Jacob Babico asked Don to share his proposal with the Committee members.

Don stated that earlier this year, a United States Post Office in the unincorporated town of Skyforest, CA in rural San Bernardino County requested that a stand-alone directional guide signs be placed to guide motorists on State Route 18, at the intersection of "Rim of the World Highway", (aka California State Route 18) and Kuffel Canyon Road. Caltrans District 8 office in San Bernardino referred the request to San Bernardino County to make the request. No "Post Office" guidance sign standards exist and Caltrans Traffic Operations developed a symbol sign utilizing an approved post office symbol from a recreational RM-110 post office sign, as shown in Chapter 2H, Figure 2H-5, on page 2H-18. The sign size is 42" wide x 30" high, designed to be placed on a one-post sign support. Provisions for this sign to be paid for and maintained by funds other than State Highway funds are included in the policy.

Don Howe asked the Committee to make recommendations for the adoption of the sign as proposed in the agenda packet shown on pages 37 and 38.

Chairman Bahadori asked if Committee members had questions for Don Howe.

Steve Lerwill commented that on page 37, under the proposed standards, he does not like the last sentence which states, "Approved by the local Post Master for its location, installation," he stated the determination of location is the responsibility of the jurisdiction who owns the roadway.

John Fisher stated that he supports the sign, however, he does not support the proposed policy. First, he would remove the standard statement. If a sign is warranted, it is the responsibility of the agency who owns the roadway, because the facility is generating traffic and the sign will provide guidance to the motorists. Second, he would modify the option statement.

Chairman Bahadori asked John Fisher if he has wording for the option.

John Fisher stated that he would propose the option as follows:

The POST OFFICE SG60(CA) sign with Symbol and Arrow may be used -on the end of freeway ramp terminals, expressways, conventional highways and on local streets and roads to indicate the direction to a local post office which is within 0.8 km (0.5 mi) of the sign location and is open six days a week during usual United States Postal Service hours.

Farhad Mansourian stated that there are not too many post offices which are open six days a week.

John Fisher stated that then he will amend his motion by striking out the time and days and his proposal is as follows:

The POST OFFICE SG60(CA) sign with Symbol and Arrow may be used to indicate direction to a local post office which located of the arterial net work.

Chairman Bahadori asked if the language prohibits installing a post office sign at freeway off-ramps.

The POST OFFICE SG60(CA) sign with Symbol and Arrow may be used to indicate the direction to a local post office which is located off of the arterial network.

Chairman Bahadori asked Jacob Babico whether the proposed language by John Fisher satisfies their needs.

Jacob Babico responded yes.

Chairman Bahadori asked for public comments, there were none.

Motion: Moved by John Fisher, seconded by Farhad Mansourian, recommended that Caltrans adopt the option language as suggested by John Fisher and signs specification shown on page 38, and delete the standard statement.

Chairman Bahadori asked for discussion on the motion, there was none.

Motion Carried 8-0.

Action: Item completed. Caltrans will post the policy on the CA MUTCD website when it approved.

05-10 Watershed sign

Chairman Bahadori asked the San Deigo Water District to present their experimentation report on the watershed sign.

Jeffery Pasek, Water District City of San Diego, Destree Bascos, Collaborative Services and Tedi Jackson, Western Municipal Water District, jointly presented Final Report on the experiment conduct with watershed sign. They used the PowerPoint presentation to share the final report and summary of their presentation is as follows:

In the California Manual on Uniform Traffic Control Devices, there is no design or specification for a watershed sign. The San Diego Water District approached the CTCDC with a proposal to conduct a pilot study with a watershed sign. The sign's purpose was two-fold. First, to serve as a reminder to motorists that they are traveling through a watershed, and secondly, to serve as a tool to increase overall awareness, that the responsibility of preserving the cleanliness of our watersheds rests on the entire community.

Before establishing a pilot program, extensive research was done to review existing signs and efforts. The research compiled information from Texas, Oregon, Washington, Georgia, and California as well as from the east coast including Chesapeake Bay through Maryland, Virginia and Pennsylvania.

There were a number of challenges such staff and funding. However, despite the challenges, the program proved to be successful in gaining support throughout California and gained over 4 million gross impressions from program efforts. In the original proposal, the program measurements identified were the number of support letters, advertising impressions, website hits, and surveys taken. Using these measurements, the total of gross impression were 3,116,771. The breakdowns for these initial efforts to date are as follows: 22 letters of support, 2,653 website visits, and 18 surveys taken. Through funding from the Metropolitan Water District and the San Diego County Water Authority, media ads were placed in various media outlets to promote public awareness of the watershed signs. Ads were strategically placed in the vicinity of the three pilot sign locations. Newspaper ads were placed in the North County Times and East County Gazette and also in the San Diego Family Magazine and the Natural Guide. In addition, cinema ads were shown movies theaters closest to the sign locations and radio public service announcements were secured to reach out to the motorists. This advertising blitz yielded a gross impression of over 3,114,078 people.

In addition to these efforts, more public awareness was generated through the City of San Diego Annual Drinking Water Reports, program newsletters, and partnerships with the Reuben H. Fleet Center and the California Watershed Network. Through these materials and partnerships, a new wave of interest and support was established and the number of educational opportunities increased. These additional efforts yielded a gross impression of over 1,583,287 people. Combining the initial and additional program measurements, there is a significant grand total of over 4,700,058 gross impressions. There is clearly a need to establish a unifying design that will maximize the exposure and education of the "keep it clean" message in the areas that are near drinking water resources. Each agency and organization that has expressed interest has already established their own educational campaign that will supplement the implementation of additional watershed signs throughout California.

By educating public and motorists about watershed boundaries there are numerous benefits at the local level, state level and federal level. The watershed sign program helps to create opportunities for the public to learn about the importance of San Diego's watersheds and encourage environmental stewardship of the watersheds by members of our community. Over 4 million gross impressions have been obtained in the program efforts and partnerships to date. There are more possibilities for increasing education opportunities by authorizing other agencies and organizations throughout California to use and install

these types of signs. With a uniform sign design, the sign becomes a recognizable icon throughout California and maximizes visual awareness of all the efforts to keep watersheds clean.

Lee Reader, Director of Non Profit Environmental Organization, provided information about the signing program for the Santa Ana Original Water District. He mentioned that they have received approval to install signs in Riverside County, San Bernardino County and Orange County.

At the conclusion, Jeffery Pasek stated that the City of San Diego, along with the Western Municipal Water District and Inland Empire Water Keeper, recommend that the CTCDC adopt the watershed sign as a part of the CA MUTCD. By doing so, the watershed sign will be available for use by other agencies and organizations throughout California.

Chairman Bahadori asked committee members whether they have question for the group.

Jacob Babico asked Lee Reader about the funds requested for the signs from the Second District Supervisor of Santa Ana Water District, that it seems excessive funds have been requested for the 15 signs.

Lee Reader responded that cost includes fabrication of signs, installation and campaigns and other miscellaneous activities.

John Fisher thanked the San Diego Water District for their efforts in receiving the approval from the CTCDC and completing their pilot study. He further added that he agreed with recommended policy shown in the agenda packet. He further added that the sign is not an essential traffic control device and serves more as an educational tool to protect watershed areas. Therefore it is fair to ask the water districts to install and maintain the signs.

Chairman Bahadori asked for comments from the public. There were none. Chairman Bahadori stated that the San Diego Water District has submitted their final report and requested approval for the sign statewide. He further informed the Committee that there are a number of water agencies inquiring about the status of the sign, and they want to install these signs.

Farhad Mansourian stated that he would like to move a motion.

Motion: Moved by Farhad Mansourian, seconded by John Fisher, recommends that Caltrans adopt the proposed policy shown on page 74 of the agenda and sign specifications shown in the agenda into the CA MUTCD. The policy is as follows:

Section 2D.48 General Information Signs (I Series)

•	
The following l	anguage will be included on Page 2D-37, after the policy of River Name (I-3) sign.
Option:	
The	Watershed, Keep It Clean (S36A(CA)) sign may be installed to identify the boundary of
•	shed areas, by its appropriate name (in the space before "WATERSHED") and provide road user
	ne directional information plaque, ENTERING (S36B(CA)), or LEAVING (S36C(CA)), as appropriate,
not otherwise inc	luded in the primary signing.
Support:	
The	Watershed, Keep It Clean (S36A(CA)) sign provides information for road users to be aware of

the geographic boundary of the geographically-named watershed, as recognized by the United States Geological Survey, and promotes environmental stewardship of watersheds by the community. The purpose of the sign is to

serve as a reminder to road users that they are traveling through a watershed, and to promote awareness that the responsibility of preserving the cleanliness of our watersheds is shared by all in the community.

Standard:

If used, the _____ Watershed, Keep It Clean (S36A(CA)) sign; and, the ENTERING (S36B(CA)), or LEAVING (S36C(CA)) plaque shall be installed and maintained under an encroachment permit by the requesting jurisdictional agency.

Motion carried 8-0

Action: Caltrans will post the approved policy and sign specs at the CA MUTCD website.

07-17 Proposal for C17A (CA) ROAD WORK Plaque and Amendment to CA MUTCD Section 6F.104

Chairman Bahadori asked Wayne Henley to introduce the agenda item 07-17, proposal to adopt C17A (CA) ROAD WORK Plaque and amendment to the CA MUTCD Section 6F.104.

Wayne Henley invited Johnny Bhullar and asked him to discuss the proposal with the Committee members and audiences.

Johnny Bhullar stated that Caltrans Division of Construction is requesting a change in the current policy for reduced speed limits in temporary traffic control (TTC) zones and the inclusion of WORK ZONE Plaque & END WORK ZONE SPEED LIMIT Sign into the California MUTCD.

Johnny Bhullar informed the Committee members that a similar request on the same topic was made during the June 7, 2007 meeting, when Caltrans had requested the committee to recommend the ROAD WORK Plaque for use with the Speed Limit Sign in TTC zones. Based on the meeting discussion, this proposal was continued for the next meeting and Caltrans was asked to address the questions raised by the Committee members. Following are the summarized comments raised by the Committee members at the June 7, 2007 meeting:

- The use of "ROAD WORK" versus "WORK ZONE."
- The text should consider "when workers are present."
- The text be formatted per John Fisher's suggestion:
- The language needs to be more generic, instead of specifying only for state highways, it should be for high speed roadways.
- The conditions 1 through 6 needs to be either "should" or "shall" conditions.
- The text needs be follow the MUTCD format.
- Review number 3, 4 and 5 conditions as discussed above.
- Why not make the existing sign Road Work/Speed Limit (C17 (CA)) sign to be used on state highway? Consider changing the policy or CVC.

This proposal was tabled in subsequent meetings.

Since tabling of this proposal in 2007, FHWA is now proposing in the next revision to the MUTCD, two new signs to reduce speed limits in TTC zones, WORK ZONE Plaque & END WORK ZONE SPEED LIMIT Sign. The proposed Notice of Proposed Amendment (NPA) to the MUTCD was open for public comment from January 2, 2008 through July 31, 2008. When FHWA issues a final rule for this revision, likely sometime in 2009, then Caltrans will look at adopting this rule for all public roadways in California within 2 years of the issuance of the final rule.

The proposed NPA is available at the following web links:

 $\frac{\text{http://a257.g.akamaitech.net/7/257/2422/01jan20081800/edocket.access.gpo.gov/2008/pdf/E7-24863.pdf}{\text{24863.pdf}}$

http://mutcd.fhwa.dot.gov/resources/proposed_amend/index.htm

Johnny Bhullar stated that he took the MUTCD proposed language and inserted Caltrans proposed language into the proposed MUTCD language.

Following are some excerpts from the final rule, as published in the Federal register on November 24, 2006:

The proposed new section is numbered and titled ``Section 6F.12 Work Zone and Higher Fines Signs and Plaques." This proposed new section contains an OPTION statement describing the use of the WORK ZONE Plaque above a Speed Limit Sign to emphasize that a reduced speed limit is in effect within a TTC zone and the FINES HIGHER, FINES DOUBLED, and \$XX FINE plaques that may be mounted below the Speed Limit sign if increased fines are imposed for traffic violations within the TTC zone, as well as the associated signs that may be used to mark the beginning and ends of these zones. The remaining sections in Chapter 6F would be renumbered accordingly.

Johnny Bhullar stated that pages 80 through 82 of the agenda packet contain the Caltrans proposed language and it is shown below:

Proposal:

The existing California MUTCD policy shown below is in black text (National MUTCD) and blue text (CA MUTCD additions/edits), while amendments/additions per this proposal are shown in red text.

Section 6C.01 Temporary Traffic Control Plans

Support:

See Section 2B.116(CA) for more information on speed limits and zones.

See Section 2B.13 for Speed Limit and Speed Zone signs.

See Section 6F.104(CA) for Road Work/Speed Zone (C17(CA)) sign, WORK ZONE (G20-5aP) plaque and END WORK ZONE SPEED LIMIT (R2-12) sign.

Guidance:

The speed limit should not be lowered more than in 16 km/h (10 mph) increment, if lowering speed more than 16 km/h (10 mph) below the posted or maximum speed.

Standard:

The reduced speed limit shall not be less than 40km/h (25 mph). Refer to CVC 22362.

Option:

If the project falls within an established 105 km/h (65 mph) zone, and a 70 km/h (45 mph) speed limit is considered necessary, it may be posted only if the approaching speed limits are lowered in two stages (i.e., first to a 90 km/h (55 mph) speed limit followed by a reduction to the desired 70 km/h (45 mph). Guidance:

Speed Limit and End Zone signs should be installed at locations jointly agreed upon by the Traffic Engineer and the Construction Engineer. The speed zone should be verified by an engineering and traffic survey.

Construction Engineer should observe prevailing vehicle speeds within the TTC zone that create a risk for workers, and public safety; and should request reduced speed limits to be established within the project limits, when workers are present.

Traffic Engineer, or their designee, should analyze prevailing speeds through the TTC zone; and, after consultation with the Construction Engineer and the California Highway Patrol, and/or local law enforcement, should develop consensus to establish reduced speed limits, when workers are present. The reduced speed limit should be jointly agreed upon in writing by the Traffic Engineer and the Construction Engineer, or their designees, for reduction of the posted speed limit.

Contracted law enforcement should provide Construction Zone Enhanced Enforcement in the TTC zone; and, cite violators of the reduced speed limit under the Basic Speed Law (CVC 22500) without the use of radar enforcement or other electronic methods.

Support:

Orders for construction speed zones are ordinarily issued for the entire length of the construction project. This avoids the necessity and resulting delay of obtaining a new order each time the speed restriction signs require relocation to fit the conditions. It is not the intention, however, that the entire length be posted for the duration of the contract.

Standard:

Speed restriction signs shall be posted only in areas where the traveling public is affected by construction operations.

Guidance:

As the construction progresses, signs should be moved as appropriate.

Standard:

Signs shall be used only during working hours and removed, or covered during non-working hours.

Signs shall be removed immediately following completion of the construction or change in the conditions for which they were installed. When the construction is completed or the speed restriction is no longer necessary, the formal speed zone orders shall be revoked.

Option:

The C17(CA) sign may be provided by the agency having jurisdiction over the street or road.

Section 6F.104(CA) Road Work/Speed Limit Sign (C17(CA))

Option:

A WORK ZONE (G20-5aP) plaque may be mounted above a Speed Limit sign to emphasize that a reduced speed limit is in effect within a TTC zone. An END WORK ZONE SPEED LIMIT (R2-12) sign (see Figure 6F-3) may be installed at the downstream end of the reduced speed limit zone.

Guidance:

The C17(CA) or R2-1 with G20-5aP should be posted a minimum distance of 120 m (400 ft) in advance of where, and when workers are present; and the Speed Reduction (W3-5) sign or Speed Zone Ahead (R2-4(CA)) sign informs road users of the reduced speed limit TTC zone.

MUTCD Proposed signs are as follows:



Johnny Bhullar asked whether the Committee members had any questions for him.

John fisher stated that he was contacted by Dave Royer, traffic consultant, who contended that the R2-1 and R2-12 signs shown on page 79 of the agenda would be applicable only when workers are present. He added that C17 sign is applicable only when workers are working next to the live traffic and when there is no worker, signs need to be removed or covered.

Johnny Bhullar responded that he is not sure about the requirement mentioned by John Fisher.

John Fisher further stated that C17 sign is only applicable when workers are adjacent to traffic. If the workers are behind the k-rail, the sign can not be used.

Chairman Bahadori stated that Caltrans proposal seems to be in permanent conditions where signs will be applicable 24-hours during the construction period.

John Fisher stated that based on the input from Dave Royer, this sign can be used only when workers are present. It seems that the proposal has conflict with the CVC.

Chairman Bahadori stated that if there is a continuous work on a segment of the freeway and work stopped at 5 pm, the construction crew is not going to remove or cover these signs and come back next day to uncover or install back. It would not be practical. Usually, the speed is reduced in construction projects when the geometric are changed, means, narrow lanes with minimum shoulder or without any shoulder. If the geometric are standards, then reduction in speed is not justified.

John Fisher stated that it will be helpful if Caltrans can clarify that proposed signs are not conflict with the CVC.

Johnny Bhullar stated that he will go back and clarify all the questions raised by John Fisher and bring back item for the Committee's consideration.

Chairman Bahadori asked comments from the public.

Walter labs stated that in his opinion, C17 sign is used when workers are doing work such as landscaping on an expressway, because they are too close to the live traffic.

There were no other public comments. Chairman Bahadori closed the public hearing and asked what is the pleasure of the Committee.

Farhad Mansourian suggested that Caltrans should take this proposal back and clarify that the proposed sign is not conflict with the CVC and bring back to the Committee.

Johnny Bhullar agreed and stated that he will go back and verify questions raised by John Fisher and bring this item back for the Committee's consideration.

06-8 FHWA's Interim Approval for Optional Use of Flashing Yellow Arrow, Traffic Control Devices

Chairman Bahadori stated that this Agenda item, Optional use of Flashing Yellow Arrow (FYA) supposed to be under the Action Items and it was a typo error. He asked the Committee members and audiences, whether they have any objection to moving this item under the Action Items. There was no objection. He asked for a motion.

Motion: Moved by Jacob Babico, seconded by Steve Lerwill, moved the FYA Item from the Information Items to under the Action Items.

Motion carried 8-0.

Chairman Bahadori further informed the Committee that this morning Subcommittee held their meeting to discuss the FYA and Johnny Bhullar who was the Leader of the Subcommittee does have recommendation from the Subcommittee for the full Committee. He invited Johnny Bhullar to share Subcommittee's finding.

Johnny Bhullar gave brief background information about the implementation of Interim Approval in California issued by the FHWA. The process is also posted at the following CTCDC website:

http://www.dot.ca.gov/hq/traffops/signtech/newtech/others/example-implementation.pdf

Johnny Bhullar stated that two years ago, the CTCDC recommended Caltrans to seek a statewide blanket approval for the use of FYA in California. The Caltrans Traffic Signal Committee wanted additional safeguards to the FHWA guidelines. Caltrans placed this item again on the agenda and informed to the CTCDC that Caltrans would not seek blanket approval for the Interim Approval as issued by the FHWA because of the conflicting phasing sequence. The CTCDC formed a Subcommittee and asked to review Caltrans proposed phasing sequence versus the FHWA guidelines and made recommendations to CTCDC on the use of FYA. He stated that this morning, September 17, 2008, from 9 a.m. to noon, the Subcommittee held a meeting and also visited in the field to observe one of the intersections operating by using FHWA guidelines. He stated that based on the discussion and field review the Subcommittee favored to use the FHWA guidelines. Kai Leung, Caltrans, Electrical Branch, advocated for using Caltrans modified phasing sequence, however, there was no data presented by Caltrans to indicate that the FHWA operation is not safe. Johnny further stated that the Subcommittee had decided that the request for these safeguards should be withdrawn in light of the FHWA's Interim Approval and CTCDC should recommend that Caltrans applies to the FHWA for a blanket Interim Approval for the use of FYA at Statewide. Johnny also pointed out an email from Mr. Scott Wainwright, FHWA, indicating that if California adopted a different standard on the FYA, then, the CA MUTCD would not be in substantial compliance with the national MUTCD. Johnny further added that currently five cities have Interim Approval from the FHWA and two of them also received approval from the CTCDC to use FYA with the FHWA guidelines. He informed that the proposed MUTCD 2009 language will have the FYA application and which states have to adopt within two years, unless the State opted not to adopt which could be violation of the MUTCD. Johnny Bhullar stated that the Subcommittee recommends for a blanket approval from the FHWA instead of individual agencies asking for approval.

Chairman Bahadori asked comments from the Committee members.

Jacob Babico informed that the FYA was discussed in one of the ITE meeting.

Chairman Bahadori asked for comments from the public, there were none.

There were no other comments.

Motion: Moved by Farhad Mansourian, seconded by Jacob Babico, recommended that Caltrans seeks a blanket approval from the FHWA for the use of FYA in California.

Motion carried 8-0.

Action: Caltrans will keep the Committee informed on the approval request.

08-19 Proposal to adopt ACTIVATED BLANK-OUT Directional and DO NOT ENTER & WRONG WAY signs.

Chairman Bahadori asked John Fisher to address the agenda item 08-19 Activated Blank-Out signs.

John Fisher stated that the concept of blank-out signs was initiated while the Committee was assisting Caltrans in the process to adopt the CA MUTCD. This issue arose because of an accident between a motor vehicle and a light rail train in which investigators thought that a blank-out sign would have been helpful to inform the driver of a prohibited movement while the train passes parallel to a roadway. This incident occurred at a railroad crossing in Burbank, California. The traffic signal operated in the traditional pre-emption mode where the signal goes to all-red flash. There was a national review of the flashing red at the RR crossing and it was determined that it may be not a preferred way to operate a signal in flashing red mode at the RR crossing. With the availability of new technology, signals could function more efficiently. Certain movements could get red phase and others which do not interfere with crossing could get green phase. The blank-out symbols No Right Turn, a No Left Turn and DO NOT ENTER sign has been adopted in the Part 8, Traffic Controls for Highway-Rail Grade Crossings. The blank-out symbol No Right Turn, No Left Turn, No U-Turn and No U and Left Turn signs and text signs DO NOT ENTER & WRONG WAY are proposed to add in Part 2 of the CA MUTCD. The approval of these signs will give more tools to practitioners to use if there is a need. Availability of these sign in addition to the traditional signs would provide more options. These signs could be used with combination of inclusive phasing. He asked the Committee to made recommendations for the adoption of the blankout signs as shown on page 40 of the agenda.

Chairman Bahadori asked comments from the Committee members. There were no other comments from the Committee members.

Chairman Bahadori stated that he is fine with the No Turn signs, however, he has concern to use electronic signs for the DO NOT ENTER and WRONG WAY. He added that the consequence of failing of an electronic signs in those conditions would be verse situation, because, there will be a head on collision.

Chairman Bahadori asked for public comments.

Robert Shanteau, Consultant, stated that the bicyclist advocates are interested in how to prevent conflicts where bicycle side paths cross the streets. A red right arrow could do the same job. He asked what is the difference between a blank-out sign and a traffic signal display. The two displays are required for a movement in case one goes out and same should be true for the blank-out signs.

John Fisher responded that red arrow occurred when there is green arrow. It is used in many cases when there is an exclusive right turn lane available. He added that if a major roadway runs parallel to the RR and during the preemption time, the through movement parallel to RR would have green signal, however, there will be an indication for the no right turn, because of the presence of train. In this case, blank-out sign could be used to prohibit the right turn movement because, there is no exclusive right turn lane.

Jeff Knowles from Vacaville asked whether blank-out signs could be used to prevent conflicts during the pedestrian phase.

Walter Labbs of Santa Rosa stated that they are already using blank-out signs for turn prohibitions during a particular time-of-day.

Johnny Bhullar stated that blank-out signs are already included in the CA MUTCD Part 8 and Part10, Traffic Controls for Highway-Rail Grade Crossing and Highway-Light Rail Transit Grade Crossings. Johnny Bhullar further stated that during the last meeting, the City of Prismo Beach requested experimentation with the blank-out signs to prohibit turning movements during certain time periods. That was the reason John Fisher recommended to include these signs in Part 2 of the CA MUTCD so that the practitioners have another tool to use.

Joe Indrawan of Chino stated that they are using blank-out signs to supplement static signs during the peak period prohibitions.

There were no other public comments. Chairman Bahadori closed the public comments and opened discussion amongst Committee members.

Deborah Wong stated that the City of San Francisco uses static turn prohibition signs by using the hours of prohibition on the sign.

John Fisher stated that blank-out signs would be useful for controlling reversible lanes and for prohibiting turns into reversible lanes. He recommended that blank-out signs to be added in Part 2B. He further added that LA prefers blank-out signs over static signs for peak period prohibitions.

Jacob Babico asked whether blank-out signs could be used at any intersection. Would Caltrans object to the use of WRONG WAY blank-out signs, since there might be some confusion with the use of static signs with the same message on freeway ramps?

Johnny Bhullar responded that California is the only state that is different from the national MUTCD in regards to the WRONG WAY/DO NOT ENTER packages and Caltrans supports the adoption of the blank-out signs.

Chairman Bahadori stated that he has concerned with the possibility of failure of an electronic WRONG WAY/DO NOT ENTER blank-out signs. He would like to see two sets of blank-out signs to be used for the WRONG WAY/DO NOT ENTER, as two heads required for a traffic signals, if one failed other one is working.

John Fisher stated that there would be limited locations available to place a second blank-out sign, especially for the turn signs

Chairman Bahadori stated that he is not concerned about the turn signs, he has concerned regarding the WRONG WAY/DO NOT ENTER blank-out signs.

John Fisher responded that he will go along with the idea of two sets of WRONG WAY/DO NOT ENTER blank-out signs, if used.

There were no other comments.

Motion: Moved by John Fisher, seconded by Farhad Mansourian, recommends that Caltrans adapt the blank-out signs and policy as shown on page 40. If DO NOT ENTER and WRONG WAY signs used as blank-out signs, they shall be used in two sets.

Motion carried 8-0.

Action: Item completed. Caltrans will post the new policy on the CA MUTCD website and inform the Committee when it is adopted.

08-14 Proposal to amend recommendations made by the CTCDC in regards to Section 2B.13 Speed Limit Sign

Chairman Bahadori asked Farhad Mansourian to discuss the agenda item 08-14, speed limit.

Farhad Mansourian stated that this item has been on the CTCDC agenda for about two years. During the last meeting, CTCDC formed a Subcommittee to discuss the various proposals in regards to the speed limit policy and make recommendations to the CTCDC. The Subcommittee held their meeting on August 1, 2008 in Sacramento. The Subcommittee members were agreed on the proposed language shown in the agenda, except on the 50th percentile floor. Three members supported for the hard floor, while five members supported a soft floor. The following is the recommendation of the Subcommittee and the Subcommittee unanimously supported the following language except the 50th percentile floor.

Standard:

When a speed limit is to be posted, it should shall be within 10 km/h or 5 mph of the 85th-percentile speed of free-flowing traffic, except as shown in the option, below.

Option:

The posted speed may be reduced by 10 km/h (5 mph) from the 10 km/h (5 mph) increment below the 85th-percentile speed, in compliance with sections 627 and 22358.5 of the CVC.

Guidance:

The final posted speed limit should not be less than the 50th-percentile speed.

Standard:

If the final posted speed limit is not within 10 km/h (5 mph) of the 85th-percentile speed or is below the 50th-percentile speed, it shall be documented in writing that cites the conditions and justification for the lowered speed, in compliance with sections 627 and 22358.5 of the CVC.

The proposal is that the speed limit should not be less than the 50th percentile speed, however, if the conditions that are not readily apparent to the drivers, the speed could be below 50% percentile but it shall be documented.

Chairman Bahadori said that the *People vs. Goulet* ruling required such documentation anyway. He also acknowledged letters received from the City of Carlsbad, the City of Escondido, and from the Santa Clara County Police Chiefs' Association. Chairman Bahadori asked comments from the Committee members.

Steve Lerwill stated that he believes the speed limit shall not be less than the 50th percentile speed.

Chairman Bahadori asked for public comments.

Walter Labbs from Santa Rosa stated that he want to go on record that the City of Santa Rosa is opposed to any mention of the 50th percentile speed, either as a soft floor (should) or as a hard floor (shall). There are nine pages in Section 2B.13, any amendment to the language should include a rewrite of the entire section and removal of any conflicting statements. Any changes to the procedures for conducting an engineering and traffic survey should not be retroactive. The revisions should be effective on the date adopted.

Ron Miller, Associate Engineer/ Traffic Division, City of Escondido, commented on the proposed language shown in agenda and cited "Standard" of the revised sub-committee language notes, "If the

posted speed limit is not within 10 km/h (5 mph) of the 85th-percentile speed or is below the 50th-percentile speed, it shall be documented in writing that cites the conditions and justification for the lowered speed. He stated that when conducting radar surveys for low speed limit areas of 30 mph to 35 mph the sample size is quite compressed. This compression of speeds into a narrow band width can result in the speed limit being set at the 5 mph increment immediately below the 85th-percentile but the posting could be below the 50th-percentile. He gave example of a street segment with an 85th of 32 being legally posted at 30 MPH, but the 50th-percentile of the radar sample is 30.33 mph and based on the new standard statement the City need to do extra paperwork, when speed is established according to the first standards listed in the proposed language.

Ron Miller suggested that the Committee change the 'or' contained in the referenced "Standard" to an 'and'". This would allow a speed limit to be properly established within the 5 mph increment containing the 85th-percentile, even if was below the 50th-percentile, it would be acceptable.

Ron Miller informed the Committee that North San Diego County court commissioners does not allow the citing of conditions allowed in the CVC, Sec. 627, for lowering a posted speed limit. They overrule the "conditions not readily apparent to motorists" as not being valid. This means they also do not allow the additional decrease by 5 mph of the indicated speed limit derived from the radar survey for their same justifications.

Mina Layba from the City of Thousand Oaks supports the adoption of the proposed language shown in the agenda packet.

Bahman Janka, City of Pasadena, stated that some agencies are interpreting the current wording in the Vehicle Code to allow more than one 5 mph reduction. The wording needs to say that only one 5 mph reduction for conditions not readily apparent to the driver can be applied.

Laura Wells, City of San Jose, stated that the City of San Jose and the California Police Chiefs' Association have submitted letters in support of the recommended language. A requirement that the speed limits were required to be not less than the 50th percentile would effectively eliminate the ability to apply the 5 mph reduction for conditions not readily apparent to the driver.

There were no other public comments. Chairman Bahadori closed the public comments and opened discussion amongst Committee members. He commented that the speed limits below the 50th percentile speed harmed the public's respect for speed limits in general.

Farhad Mansourian suggested that the Committee members should first decide on the issue of a "hard" versus "soft" floor, because the remaining proposed language is accepted by all members.

Steve Lerwill stated that he supported a hard floor because traffic courts are not supporting speed limits below the 50th percentile.

Wayne Henley stated that Caltrans supports a hard floor.

Ed von Borstel stated that he also supports a hard floor.

Chairman Bahadori stated that it was the legislature that requested the CTCDC to address the issue of speed limits.

Chairman Bahadori asked motion on the hard vs. soft floor.

Motion: Moved by John Fisher, seconded by Deborah Wong, recommended to keep the soft floor as proposed in the agenda packet.

Motion failed 5-3 (Steve Lerwill, Wayne Henley, and Ed von Borstel voted against. The CTCDC Bylaws require a concurring vote of six members on all policy decisions).

NOTE: Chairman Bahadori informed the Committee members and audiences that the meeting recording device had failed to record the meeting from 9 a.m. to 10:24 and now it has been fixed and working. He asked the speakers to email their comments to the Secretary so that they can reflect in the meeting minutes.

Farhad Mansourian stated that the previous motion was not clear because it was only for the hard versus soft floor. He would like to see if someone wants to make another motion on the proposed language.

Motion: Moved by Jacob Babico to adapt the proposed language as shown in agenda. John Fisher seconded the motion with the following amendment:

Standard:

If the final posted speed limit to be posted is not within 10 km/h (5 mph) of the 85th-percentile speed or is below the 50th-percentile speed, it the engineering study shall be documented in writing that and shall cites the conditions and justification for the lowered speed, in compliance with sections 627 and 22358.5 of the CVC.

Chairman Bahadori asked Jacob Babico if he accepts the amendment proposed by John Fisher.

Jacob Babico agreed with the amendment.

Chairman Bahadori asked for discussion on the motion.

Ed von Borstel stated that he has no further comment.

Steve Lerwill stated that his position is same as previous stated.

Wayne Henley agreed with Steve Lerwill's comments.

John Fisher stated that the proposed soft floor provides the flexibility and at the same time put obligation on the jurisdictions to cite rational if they are going to be below the threshold. It drives the balance which the Committee and Caltrans tried to achieve in many discussions. In his opinion, this provides flexibility and would hold jurisdictions accountable for the professional study if they go below the threshold.

There were no other comments.

Motion carried 6-2 (Steve Lerwill and Wayne Henley voted against).

The amended proposed language is as follows:

Standard:

When a speed limit is to be posted, it should shall be within 10 km/h or 5 mph of the 85th-percentile speed of free-flowing traffic, except as shown in the option, below.

Option:

The posted speed may be reduced by 10 km/h (5 mph) from the 10 km/h (5 mph) increment below the 85th-percentile speed, in compliance with sections 627 and 22358.5 of the CVC.

Guidance:

The final posted speed limit should not be less than the 50th-percentile speed.

Standard:

If the final posted speed limit to be posted is not within 10 km/h (5 mph) of the 85th-percentile speed or is below the 50th-percentile speed, it the engineering study shall be documented in writing that and shall cites the conditions and justification for the lowered speed, in compliance with sections 627 and 22358.5 of the CVC.

Farhad Mansourian and Chairman Bahadori asked Wayne Henley that the Committee will appreciate a response from Caltrans, whether Caltrans will go along with the Committee recommendations. If Caltrans agreed with Committee's recommendations, then what would be the time frame to issue a final directive on the speed limit, because many jurisdictions are waiting the final word to upgrade their speed limit surveys?

Wayne Henley responded that he will get back to the Committee on this in a timely manner.

Jacob Babico stated that he supports the comments previously made by Walter Labbs that the speed limit section needs a revision because there are conflicting statements.

Chairman Bahadori agreed with Jacobs Babico comments.

Don Howe asked if any one wants to volunteer their efforts in rewriting the CA MUTCD Section 2B.13 Speed Limit Sign. Walter Labbs, City of Santa Rosa, Laura Wells, City of San Jose, Joe Indrawan, City of Chino, Monica Suter, City of Santa Ana, and Bob Shanteau, Consultant, offered their services in rewriting of this section.

Action: Item completed. Caltrans will keep the Committee informed on the progress of finalizing of this item.

08-8 Bicycle and Motorcycle Detection at New or Upgraded Signalized Intersections

Chairman Bahadori informed the Committee that this item is to comply with AB1581 and he has received a letter from Assembly Woman asking that CTCDC adopt a policy which allows all the traffic signals to be in compliance with this bill in the year of 2019. He informed that he has spoken with Chief of Staff of the Assembly Member and explained to him that it is not in the preview of the Committee and Committee cannot make any recommendations to Caltrans in regards to their proposal.

Chairman Bahadori asked Wayne Henley to address the agenda item 08-8.

Wayne Henley invited Kai Leung, Caltrans, and asked him to discuss proposed guidelines to satisfy the AB1581 with the Committee and audiences.

Kai Leung of Caltrans gave a presentation on behalf of the AB 1581 Subcommittee's chair. Kai Leung stated that the Subcommittee formed to develop guidelines and standards for the bicycle/motorcycle detection system. Kai Leung first read each slide, and then gave a short commentary. After about the 9th or 10th slide, Chairman Bahadori interrupted him and asked to go directly to questions because the proposed language has been included in the agenda packet and everybody has that in front of them. Kai Leung stated that the Subcommittee has proposed a language which is included in the agenda packet and asked the Committee to make recommendation for the adoption to satisfy the requirement of AB1581. Kai Leung stated that the Subcommittee held three meetings and developed the guidelines to detect the bicycle/motorcycle at the signalized intersection. He stated that the Subcommittee recommends the following language to be adopted into the CA MUTCD:

Section 4A.02 Definitions Relating to Highway Traffic Signals

15. Detector – a device used for determining the presence or passage of vehicles, bicycles or pedestrians.

50A. Reference Bicycle-Rider – a minimum 4' tall person, weighing minimum 90 lb, riding on an unmodified minimum 16" wheels bicycle, with non-ferromagnetic frame, aluminum rims, stainless steel spokes, and head light. Such bicycle-rider combination when properly placed in an approved detection system, shall be detected at least 95% of the time. The Reference Bicycle-Rider shall be considered adequate for testing motorcycle detection. Functional equivalent of the Reference Bicycle-Rider would be allowed for certification.

29A. Limit Line Detection Zone – a 6'x6' area immediately behind the limit line, centered in the lane, anywhere within which the Reference Bicycle-Rider shall be detected at an accuracy level of 95 percent or better under all weather and lighting conditions. If the lane is wider than 12', then the left edge of the detection zone shall be 3' from the lane line.

Section 4D.105 (CA) Bicycle/Motorcycle Detection

Standard:

All new detector installations and modifications to the existing limit line detection shall provide a Limit Line Detection Zone.

Support:

CVC Section 21450.5(b) states that upon the first placement of a traffic-actuated signal or replacement of the loop detector of a traffic-actuated signal, the signal would have to be installed and

maintained, to the extent feasible and in conformance with professional engineering practices, so as to detect lawful bicycle or motorcycle traffic on the roadway.

Option:

Where the full 6'x6' Limit Line Detection Zone cannot be established, a Bicycle Detector Symbol (BDS) shall be installed to indicate the best possible detection area for the bicyclists/motorcyclists to stop. Guidance:

Where a BDS is installed, the following standards should apply:

- 1. The BDS should be in the center of the bicycle lane
- 2. The BDS should be installed to the left for the right-most through lane when a bicycle lane is absent
- 3. The BDS should be installed to the right for the right-most left turn lane
- 4. Where multiple left turn lanes are present and U-Turn is allowed, the BDS should also be installed to the left for the left-most left turn lane
- 5. The BDS should be at least 30" from the nearest travel lane
- 6. The BDS should be at least 18" from the center of the lane to avoid oil slick

The Limit Line Detection Zone is not required for phases that are on permanent recall or fixed time operation.

Standard:

The Reference Bicycle-Rider shall be used to confirm the accuracy level of 95 percent or better under the following situations:

- 1. A new detection system has been installed
- 2. The detection configuration has been modified
- 3. A complaint has been made about lack of detection by bicyclists/motorcyclists

Guidance:

Signalized intersections may use multiple detection technologies (hybrid systems) to detect bicycles and motorcycles.

Standard:

Bicycle push buttons shall be used in areas where it is not feasible to establish detection, permanent phase recall, or fixed time operation.

Option:

Bicycle push buttons may be used to supplement bicycle/vehicle detection.

Standard:

The BDS shall not be used in any lanes that lead to facilities where bicyclists are prohibited.

Guidance:

Safety and detection of the bicyclists/motorcyclists should be considered in the placement of the BDS.

Section 9C.05 Bicycle Detector Symbol

Option:

If the Reference Bicycle-Rider is not detected in the full Limit Line Detection Zone, then a Bicycle Detector Symbol (see Figure 9C-7(CA)) may be placed on the pavement indicating the optimum position for a bicyclist to actuate the signal.

An R10-22 sign (see Section 9B.12 and Figure 9B-2) may be installed to supplement the pavement marking. Support:

Section 4D.105 (CA) and Figure 4D-111 (CA) contain information on bicycle detectors and their locations.

Kai Leung then introduced Bob Shanteau, Subcommittee member, who sat next to him so that he could help him answer questions. Kai Leung asked Committee members if they had any questions for him.

Farhad Mansourian commented on item number 4 under the guidance statement and asked if there are multiple left-turn lanes then, which lane would have bicycle/motorcycle detection system. The bicyclist will not be in the far most left lane when they turn left, the bicyclist would be in the far most right left-turn lane. Motorcycle would not have any problem, because they could use any lane. For U-turns, it is a different situation, however, for multiple left-turn lanes bicyclist would be in the right left-turn lane to make his movement. He also pointed out item number 5 under the guidance statement and stated that the requirement of 30" conflict with the definition of 29A which mentioned 3' or 36". He also asked that under the standard; a bicycle push button is mentioned, is there any standards exists for the bicycle push button sign? He further asked how a signal technician would establish that a bicycle was detected with 95% accuracy. He asked why the Subcommittee recommendations do not contain any sketches/graphics of the locations of Bicycle Detector Symbols.

Chairman Bahadori advised Kai Leung and Bob Shanteau to write down all the questions raised by the Committee members and then respond to them all together.

John Fisher stated that he agreed with Farhad Missourian's comment about the graphic requirement. He further stated that he agreed with most of the language developed by the Subcommittee. He commented on the definitions included in the proposal. He stated that definitions are generally included if they are used numerous times in the text. In this case, it is an explanation and this could be covered under the "support" statement. He stated that the whole proposal is explained in the text and it would be clearer if graphics are shown to cove the text explanation. John Fisher stated that there is a push button sign R2-60C for bicyclist and that sign should be mentioned in the guidelines.

Wayne Henley commented that CA MUTCD covers most of the concept in diagrams or with illustrations, he supports the comments that there should be graphics or illustrations to incorporate text explanation.

Steve Lerwill asked if the push button is for the left movement or for the through movement. Are the pedestrians going to use same push button for crossing?

Chairman Bahadori asked Kai Leung and Bob Shanteau if they would answer to the questions raised by the Committee members, because some public members may have the same questions.

Bob Shanteau responded to Dual left-turn lane question and stated that if there is a dual left-turn lane and u-turn is allowed then, bicycle detection shall be in both lanes. If u-turn is not allowed, the bicycle detection will be to the right for the right-most left-turn lane. If there is a triple left-turn with u-turn allowed then, there will be no detection in the middle lane.

Bob Shanteau responded that the sketch/graphic will be developed. He further added that the reason they included definitions because they will be used in Chapter 4 under different sections. The push button is shown in Caltrans Standard Plans.

Steve Lerwill asked if the bicycle push button is used, it would be for the left-turn or for the through movement or for both.

Bob Shanteau responded in his experience that the left-turn movement would be controlled by detection system, the push button would be for the through movement and it would be used only for unusual conditions where detection system would not be installed.

Note: There was discussion on the bicycle push button. If a bicycle push button used for the areas where it is not feasible to establish detection system, would the bicycle push button be used for both the left-turn movement and for through movement. The standard should clarify this confusion.

Kai Leung commented that the preference is to have bicycle detections, however, if geometric does not allow a 6'X 6' detection zone at the right hand lane, then a push button would be used for the through movement not for the left turn movement.

Bob Shanteau stated that the definition of Section 29A and guidance Number 5 is different because if a Limit Line Detection is installed then bicycle symbol is not needed. However, if bicycle Limit Line Detection Zone is not established then bicycle symbol is required and that is where you use this definition.

John Fisher commented on the guidance statement, "The Limit Line Detection Zone is not required for phases that are on permanent recall or fixed time operation" and stated that this statement needs to be a standard statement not guidance.

Chairman Bahadori opened item for public comments.

Ron Miller, City of Escondido, stated that most of the agencies are going away from the in-pavement loops detection system and using video (optical) detection system. He would like to see the video system is an option and should be included in the guidance.

Jeff Knowles, Alternate member, stated that the recommendation front of the Committee is to adopt the red language shown in the agenda, however, he suggested not to adopt because, even diagrams would not clear this detail guidelines. The bicyclist usually stays right of the travel lane and the guidance number 2 says, "The bicycle detection system should be installed to the left for right-most through lane, when a bicycle lane is absent." He added that the bicyclists are required to ride to the right and so a Limit Line Detection Zone in the center of a travel lane was inappropriate.

Martin Amundson, LA County, stated that the subject should be divided into two headings: one motorcycle and other bicycle. He raised two issues, first, if bicycle symbol is installed, it will be under vehicle tire track and it will cause problem for maintenance to maintain. Second, when a bicyclist is in the right lane, usually at the intersection they rest on the curb and if detection system is at the left it will not activate the signal.

Monica Suter, City of Santa Ana, objected to the requirement to detect bicycles by describing a situation in Santa Ana recently where they did not install a bike lane because there was not enough money in the budget to pay for detection. She stated that the diagram is necessary and they belong in the Caltrans standard plan. She cautioned not to use too many "shalls" and replace with "shoulds".

Conrad Lapinski, City of Dana Point, stated that in the proposed language there is a statement that detection accuracy shall be 95%. He added that it will be difficult to measure and maintain 95% accuracy. What will happen if the intersection is detecting 94%? He stressed that do not put a number with shall statement, because it will create liability issues.

Cesar Rono, City of Santa Clarita, commented that by using strict guidelines the agencies may loose capacity at the signalized intersection and defeats the whole purpose. He further added that the signal

timing for bicyclists would require longer minimum green times, which are problematic at the large intersections.

Johnny Bhullar stated that the definition statement itself is a "shall" statement and be careful when you add definition statement in guidelines.

There were no other comments from the public, Chairman Bahadori closed public comments and opened discussion amongst Committee members.

Farhad Mansourian stated that he appreciates the work accomplished by the Subcommittee, however, there are number of issues raised by the Committee members and by the public. He would like to see a diagram/graphic, there are too many "shalls" statements, 95% requirement is difficult to measure and it would be a liability issue. He further added that even the proposal is independent technology; he wants to make sure it is not omitting the use of video/optical detection system and may split heading into motorcycle and bicycle.

Jacob Babico agreed with Farhad Mansourian's comments and commented that the Subcommittee should revisit and address questions raised by the Committee members and by the public.

John Fisher stressed on the support statements. He added that Support statements in the CA MUTCD help practitioners to understand the underlying rationale associated with the guidelines. He recommended addressing the requirement for bicyclists to ride to the right.

Chairman Bahadori stated that the Subcommittee may consider adding members, such as practitioners and video detection suppliers. The Subcommittee needs to consult with Johnny Bhullar on the format of CA MUTCD.

Kai Leung responded that the 95% accuracy was specified so that the bicyclists would not be stranded at a red light.

There was discussion on the 95% requirement amongst Committee members and Kai Leung. The question was how to measure it to find whether the detection system is achieving 95% requirements. The Committee members and public was not in favor to use a number, they stated that it would be open for legal battles.

John Fisher suggested adding a support statement which covers the requirements of detection, such as 95%.

The Committee unanimously recommended taking it back to the Subcommittee to address question raised and bringing back for review and action.

Kai Leung agreed with the Committee comments and added that Steven Shladover will share the bicycle timing study done at the two intersections in the Bay Area.

Steven Shladover stated that the issues to consider in bicyclist signal timing were measurements of crossing times, experimental method, experimental results, interpretation of results, simulations of effects on traffic, simulation method and simulation results.

Steven Shladover further stated that two intersections included in the Study were El Camino Real (SR-82) in Palo Alto and Telegraph Ave. at Russell St. in Berkeley. Steven shared the bicycle rider diversity at both intersections, diversity of bicycling population, bicyclist crossing times, and what percentile of crossing behavior to accommodate? He also shared the impacts on mainline traffic of longer green crossing intervals to accommodate bicyclists, possible increased delays and queue lengths, differences

between peak and off-peak traffic conditions and interference with mainline signal coordination, compare with effects of pedestrian cycles. A key finding in the bicyclist crossing behavior shows substantial diversity in speeds and start-up times at each site.

Steven Shladover shared the equation to calculating minimum green time as a function of street width as follows:

Green time = Starting Offset time (s) + (Width in ft)/(Final crossing speed in ft/s) – (Yellow + all-red time)

Steven Shladover shared the results of the PATH study on bicycle crossing times that were conducted at two intersections, one is in Palo Alto and the other is in Berkeley. The research investigator has two different findings, indicating that every intersection has its own unique characteristics and needs to be treated differently. Although, the research has collected comprehensive data at these two locations, but the fact is that the study has only observed the bicycle crossing times at two signalized intersections. Therefore, it would be premature to make a recommendation to the CTCDC regarding the minimum green times at this time. Steven Shladover stated that he wants to presents his findings to the CTCDC, and he would like to see additional guidance from the CTCDC regarding minimum green times.

Note: Click on the following weblink to see complete PowerPoint Presentation:

http://www.dot.ca.gov/hq/traffops/signtech/newtech/agenda/AB1581_BikeProjectResults4Caltrans_August 08.pdf

Steven Shladover asked the Committee members if they had any questions for him.

The Committee members commented that the samples for bicycle timings are limited only to two locations from the Bay Areas, it should be more diversified to include areas such as Sacramento, Davis, Los Angeles and rural community. The results of the diversified study then should be implemented in San Francisco and Los Angeles to see how it works on a signalized net work. The diversified study will also help to support how to timing the signals for bicyclist in relation to the initial green, vehicle green extension, yellow and all red.

John Fisher said that Steven Shladover's recommendation to make the minimum green longer along with additional all-red time could have serious impacts on signal timing.

Steven Shladover responded that the increased minimum green times would have a minimal effect on most signals and that the time needed to serve pedestrians has a much bigger impact. He added that the scope for his research did not include addressing all-red time for bicyclists.

The CTCDC then encouraged Steven Shladover to look at bicycle crossing times at more intersections in order to give a more informed recommendation on signal timing for bicyclists.

Kia Leung responded that the subcommittee will consider CTCDC comments and bring back item for recommendations.

08-25 Proposal to Seek Blanket Interim Approval for Optional Use of Rectangular Rapid Flashing Beacons (1A-11) from the FHWA

Chairman Bahadori asked Caltrans to address the agenda item 08-25, Interim Approval for Optional Use of Rectangular Rapid Flashing Beacons (1A-11) from the FHWA.

Don Howe, Caltrans, stated that the FHWA has issued Interim Approval for Optional Use of Rectangular Rapid Flashing Beacons (1A-11). Caltrans placed this request on the agenda according to previous discussion between the Committee and Caltrans which is, all Interim Approval be placed on CTCDC agenda for Committee discussion and if Committee agreed that the device could be used in California, then the Committee will ask Caltrans to seek blanket approval for the whole State. Caltrans would like to know Committee's direction on this Interim Approval.

Johnny Bhullar shared with the Committee the process for adoption of Interim Approvals in California issued by the FHWA. It is also posted on the CTCDC website:

http://www.dot.ca.gov/hq/traffops//signtech/newteck/

Chairman Bahadori asked Committee members if they had questions for Don Howe or Johnny Bhullar. There were none.

Chairman Bahadori opened the item for public comments. There were no public comments. He opened discussion amongst Committee members.

Motion: Moved by Farhad Mansourian, seconded by Steve Lerwill, recommended to seek blanket approval from the FHWA for the Interim Approval for Optional Use of Rectangular Rapid Flashing Beacons (1A-11).

Chairman Bahadori opened discussion on the Motion.

John Fisher stated that he fully supports the experimentations process. However, in this case a vendor submitted a request to experiment a particular device and asked for approval from the FHWA behalf of a local agency. There were recommendations to test this device with other flashing beacons to see which one is more effective. However, the vendor and testing agency only conducted experiment with the device which they originally submitted to the FHWA. He stated that the FHWA has issued Interim Approval for a specific device. In his opinion, there should be more options available and should not be limited to one particular size and shape. He encouraged that if a local agency wants to use this device, they should also use different size and shapes to see which one is more effective. He will not recommend adoption of the FHWA Interim Approval in California, instead he would favor if an agency would like to use this type of device, they should seek approval from the CTCDC and test multiple devices. If other devices are equally effective, then why limit to a particular shape and size.

John Fisher added that if the Committee were to adopt the Interim Approval, Caltrans would lose the opportunity to direct experiments using conventional beacons and a variety of different shapes of light units.

Farhad Mansourian stated that the reason he suggested to seek blanket approval so that individual agencies do not have to go to FHWA's for approval. If Committee do not take action, then the individual have to go to the FHWA and then to CTCDC for approval.

Steve Lerwill stated that John Fisher raised good points, and the Committee does not want to adopt a sole source device which is limited to a particular size and shape.

There were no other comments.

Chairman Bahadori asked that there was a motion and it was seconded, he asked for the vote.

Motion failed 0-8.

Farhad Mansourian stated that after the discussion on the motion he agreed with John Fisher's comments.

Action: Item completed. If an agency would like to use the device recommended by the FHWA, the CTCDC would like to see other devices be used to see which one is more effective.

Request for Experiments:

08-26 Requested Approval to Experiment with Flashing Yellow Arrow for Protected Permissive Left-Turn Phasing

Chairman Bahadori gave a brief background on this item. He stated two years ago the Committee asked Caltrans to seek Blanket Interim Approval from the FHWA for the use of Flashing Yellow Arrow for the California. Caltrans has some concerns with the FHWA guidelines and decided not to seek blanket approval for the whole state. During the subsequent meetings, the Committee established a Sub committee to review all the concerns and submit their finding to the full Committee. The Subcommittee recommended to the full Committee that there is no data to justify Caltrans concerns and therefore the Subcommittee recommends that blanket Interim Approval should be requested from the FHWA.

Chairman Bahadori told the City of Santa Clarita that experimental request is not needed and the City could use the devices.

Cesar Rono, City of Santa Clarita thanked John Fisher for the sponsoring of their request and the Committee for approval.

01-9 In-Roadway Warning Lights at R/R Crossings

Chairman Bahadori informed that the item was withdrawn by the California Public Utility Commission (CPUC) Office because there were a number of hundred to conduct the experiment. The CPUC received approval in 2001 and devices were installed in 2004 and then removed in 2005.

It is recommended that the item be removed from the CTCDC pending items under experimentation and item considered to be closed.

7 Discussion Items

05-5 Discussion on the Final Report in regards to the Experiment conducted with Neighborhood Electric Vehicle (NEV)

Chairman Bahadori asked Caltrans to discuss agenda item 05-5, NEVs. He further added that NEVs concept is getting popularity in California and suggested that the Committee consider developing signs and marking standards before everybody comes with their own ideas.

Don Howe stated that the PowerPoint presentation he is going share with the Committee is prepared by Tom Cosgrove of TCC Consulting and Leo Rubio, Bennet Engineering Services. Neighborhood Electric Vehicles (NEVs) is becoming a more popular concept as an alternative mode of transportation as fuel prices reach record high levels. The California communities of Lincoln and Rocklin have developed transportation plans for NEV, facilities that include shared trails with bikes and pedestrians, separate lanes on streets with speeds higher than 35 mph, parking with electric charging facilities, and public information programs. Don Howe stated that NEVs are zero-emission, environment friendly and their popularity is increasing, especially within the retirement community.

Don Howe stated that Caltrans Director is very interested in this emerging transportation mode and will look at expanding the State Transportation Plan to include NEVs as an alternative mode in the future community transportation plans.

Don Howe stated that the NEVs are more than just "golf carts" and are classified as "low-speed vehicles." NEVs are capable of exceeding a speed over 20 mph. NEVs are also subject to Federal Motor Vehicle Safety Standard Signs, pavement markings, vehicle codes, and design standards for these facilities that need to be standardized to promote the safety and greater use of NEVs. Orange County is now working on a NEV Transportation Plan in Southern Orange County per SB 956 (Correa) and the plans and details are in development stage.

Don Howe asked the Committee members that Caltrans is planning to have Workshop to discuss NEV concept and would appreciate if CTCDC members could participate.

Chairman Bahadori asked members if they had any questions or comments on this item.

Jacob Babico commented that there is an existing CVC which allows use of Golf Carts on roadway with vehicles where the speed limit is 25 mph. The difference between NEVs and Golf Cart is NEVs requires all the safety features just like a motor vehicle as well driving license. Also, other differences is, NEVs could share lane up to 35 mph speed and allowed on roadway above the 35 pmh as long as a separate lane is provided. However, Golf Cart is only up to 25 mph speed limit.

Don Howe stated that Caltrans is promoting the concept, however, there are some concerns from the bicycle community to share lane with NEVs. He added that Caltrans would like to call a Workshop involving Bicycle Advisory Committee, City Lincoln, City of Rocklin and would appreciate the involvement of this body.

John Fisher asked what would be the role of CTCDC at this stage? The current legislation allows in only two cities.

Chairman Bahadori stated that there is a legislation which allows NEVs in an unincorporated community of Orange County.

Don Howe commented that Caltrans Director wants to take a lead and promote the concept for the whole State.

John Fisher stated that if there is legislation which allows the use of NEVs outside the approved communities, then, the CTCDC could work hand to hand with the legislation to develop standards.

Chairman Bahadori stated that he applaud Caltrans on taking a lead on this concept and asking for Committee's involvement in developing standards. He added that this is coming and the Committee may start looking to develop standards. He asked Done Howe when he is planning to have a Workshop.

Done Howe responded that since the next meeting will be in Northern California, it would be appropriate to set up Workshop a day before the actual CTCDC meeting so that the Committee members do not have to travel twice.

Wayne Henley stated the Committee should stay ahead of the game. There are two ongoing experimentations and a third one is authorized by the legislature for the Orange County. He prefers if Orange County use the same type of signs and markings, used by Lincoln and Rocklin.

There was a comment that Orange County is planning to use signs with symbols and they will seek FHWA approval before they get approval from this Committee.

Wayne Henley commented that he does not like to see ten different communities using ten different standards.

Ed von Borstel commented that he appreciate that Caltrans is taking lead and wants to be champion on this concept.

Chairman Bahadori asked public input on this item.

Jeff Knowles commented that bicyclist may not be comfortable sharing lane with NEVs.

Bob Shanteau stated that NEVs are slow moving vehicles just like bicycles and when the lane is too narrow to share they could use whole lane. A truck climbing Donner Pass at 10 mph is a slow moving vehicle and is not in violation of the law. It is only required to use the right lane. The same is true of a bicyclist on a multi-lane road. An RV on a Highway 1 going slower than other traffic and behind which 5 or more vehicles are following is required to take the next turnout. The same is true of a bicyclist on a 2-lane road. A 45 mph speed limit on a conventional street or highway is a maximum speed limit, not a minimum. Roads are intended for all legitimate traffic, not just motor vehicles. Legitimate traffic includes vehicles and bicycles. Vehicles include horses and buggies, even though there are not many left. If a driver wants a highway with a minimum speed limit, there are freeways. He recommended that NEVs be allowed to use the travel lane on all roads, including those with speed limits greater than 35 mph.

There were no other public comments. Chairman Bahadori closed public comments and opened discussion amongst Committee members.

Jacob Babico commented that existing CVC allows Golf Carts only on the roadways which are posted up to 25 mph. He wants to ensure that there is no conflict when NEVs allowed on roadways which are above the 25 mph speed limit. In his opinion, Golf Carts and NEVs are the same.

Steve Lerwill commented on previous speaker's comments that trucks are allowed to go even 10 mph and they are not in violation of the law. He stated that trucks are allowed to use far right lane in steep upgrade

and downgrade conditions, however, if a vehicle impeding traffic, there is CVC Section which allows citing that vehicle.

John Fisher stated that Caltrans is anticipating that there might be future legislation which would allow expanding NEV operation Statewide. While it would be appropriate for the Committee to develop standards upon adoption of legislation, it is premature to do so at this time.

Don Howe stated that he will share the Workshop schedule with Committee members when it is finalized.

08-27 City of Pasadena requested CTCDC input on the proposal to amend CVC Section 40802

Chairman Bahadori asked John Fisher to introduce agenda item, a proposal to amend Section 40802 requested by the City of Pasadena.

John Fisher stated that he received request from the City of Pasadena that the City is proposing legislation to amend CVC Section 40802 and would like to seek input from CTCDC and also if CTCDC could support their proposal. John Fisher further stated that based on his opinion, the CTCDC is an advisory body to Caltrans and should not take position on the proposed legislation. He would like to ask other Committee members' opinion on this proposal.

Steve Lerwill commented that he agreed with John Fisher comment. This body should not take a position on legislation, because it is not a right form.

There were no other comments, Chairman Bahadori asked Bahman Janka to address his proposal.

Bhaman Janka stated that the City of Pasadena has proposed a minor modification to the "Speed Trap" section of the California Vehicle Code (CVC 40802). Bahman Janka stated that most cities face same problems like Pasadena when posting a 25 mph speed limit on local streets. He stated that in Pasadena there are many streets that have the same geometrics, width, however, one is posted 25 mph and other is not. The basic reason is, one of the streets is on federal highway classification map and second one is not. The CVC does allow posting of a speed limit 25 mph on federal-aid street, unless, it is supported by an ETS. It is difficult to explain local residents why one street is posted with a high speed and other 25 mph when both streets have the same characteristics.

Bhaman Janka stated that the City believes this proposed modification does not pose any contradiction to the committee's position on setting a realistic speed limits on local streets, but it also compliments the committee's proposals on establishing realistic and uniform speed limits on local streets which predominantly have similar characteristics in terms of traffic volume, street width, adjacent land use, etc.

The Bahman Janka stated the City proposal is to amend paragraph (b) (1) as follows:

The modifications essentially involve inserting the word "or" in paragraph (b) (1) of the Speed Traps Section (CVC 40802) as summarized below (only the first few paragraphs of CVC 40802 are shown below):

Paragraph (b) (1) of the Speed Traps Section (CVC 40802 as summarized below):

- (b) (1) For purposes of this section, a local street or road is defined by the latest functional usage and federal-aid system maps submitted to the federal Highway Administration or is, except that when these maps have not been submitted, or when the street or road is not shown on the maps, a "local street or road" means a street or road that primarily provides access to abutting residential property and meets the following three conditions:
- (A) Roadway width of not more than 40 feet.
- (B) Not more than one-half of a mile of uninterrupted length. Interruptions shall include official traffic control signals as defined in Section 445.
- (C) Not more than one traffic lane in each direction.

Bahman Janka further stated that he understands that the Committee does not want to take a position on this proposal, however, the City will work through the League of California Cities to introduce a legislation to amend this CVC Section. He added that if the CTCDC supports their proposal it will have more weight, but if not, that is fine with the City too.

Chairman Bahadori asked if Committee members had any questions for Bahman Janka.

Jacob Babico and Deborah Wong suggested bringing as an action item.

John Fisher commented that this body should not take any formal position on this proposal and suggested the City should go through the League of California Cities and keep the Committee informed on the status on the progress.

Steve Lerwill agreed with John Fisher's comments and stated that he would not suggest this body take any position on this proposal

Bhaman Janka stated that he does not want to bring this item back and if Committee is not comfortable to support this amendment, it is fine with the City.

Action: Item closed.

08-28 Update of CA MUTCD (Introduction) 83

Chairman Bahadori asked Jacob Babico to introduce agenda item update of CA MUTCD.

Jacob Babico stated that the current version of CA MUTCD was adopted on September 2006 and since then the CTCDC has recommended number of new items which includes signs and other amendments. He asked why the CA MUTCD does not show the changes that the CTCDC has made in the past couple of years

Johnny Bhullar stated that this topic was discussed with the Committee previously and Caltrans is following that process. FHWA requires the changes be incorporated within 2 years of adoption. He further stated that the printing the CA MUTCD is expensive. If this document is constantly changed, it will be difficult to keep track.

Chairman Bahadori asked that he would like to know the procedure for the adoption of a new policy. He stated that the Committee recommended changing the policy for the STOP sign yesterday, how this will be incorporated into the CA MUTCD.

Johnny Bhullar responded that in between printings, significant changes are distributed as Traffic Operations Directives (TOPDs) and TOPDs can modify the CA MUTCD. He further added that all the recommendations made by the Committee and adopted by Caltrans are posted on the following website under the New Policies and Directives:

http://www.dot.ca.gov/hq/traffops/signtech/mutcdsupp/index.htm

There was a suggestion to share all the TOPDs with the Committee members and then the Committee members will share it with the other local agencies.

Johnny Bhullar stated that the next revision will incorporate Revision Number 2 of MUTCD and the MUTCD 2009 addition and at that time all the policies will reflect into the CA MUTCD.

Information Items:

07-19 Wildlife Corridor Signage

Chairman Bahadori asked Jacob Babico to provide information on the ongoing experimentation with Wildlife Corridor Signage.

Jacob Babico stated that Friends of the Mountain, Inc. received approval from the Committee to conduct an experiment by using a sign with animals shown on the sign. The group would like to provide update on their efforts. Jacob Babico informed that the Board Supervisors of San Bernardino has given \$9K grant for the experimentation. Jacob Babico invited Carol Pedder and asked her to share their efforts with the Committee.

Carol Pedder distributed a hand out which contains a map showing the sign locations and their other advertising material to educate motorists and locals about the wildlife. She informed that there were 5552 reported collisions involving animals, there were 16 fatalities, 1,444m injuries, and 4,638 property damages according to the California Highway Patrol (CHP) in California. In San Bernardino alone there were 65 accidents involving motor vehicles and animals. Many of these accidents occur where natural wildlife corridor intersects with roads.

She stated that the Wildlife Corridor are decades old habitual pathways that animals use to move from one area to another. Unfortunately these Wildlife Corridors intersect with many roads and highways. With increased traffic and speed many people and animals are injured or killed. She stated that their goal with these new signs is to raise the awareness of the motoring public regarding the prevention of people versus wildlife collisions and improve traffic safety. The signs will be installed where wildlife is most likely to cross roads and highway.

John Fisher asked if you planned to survey to find out whether motorist understands the meaning of the sign compared to the standard conventional animal sign.

Carol Pedder responded that they have planned to circulate a questionnaire to motorists to conduct a survey to find out whether the signs have positive impact on motorists and if they drive more carefully.

Chairman Bahadori stated that this is just an information item and no action is needed from the Committee.

Johnny Bhullar commented that the County of San Bernardino may consider FHWA approval because symbols are included on the sign.

The Committee advised Jacob Babico to seek FHWA approval too.

9 Next Meeting

The next meeting is scheduled for January 15, 2009. The meeting will be held in the City of Lincoln, 600 Sixth Street, Lincoln, CA 95648

11 Adjourn

The meeting was adjourned at 2:45 p.m.